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UNIVERSITY OF ALBERTA

A PROSPECTIVE POLICY ANALYSIS OF DEGREE GRANTING IN ALBERTA COMMUNITY COLLEGES

BY

HEATHER LYNN MONTGOMERIE

A THESIS
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND
RESEARCH IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF EDUCATIONAL ADMINSTRATION

EDMONTON, ALBERTA

SPRING 1990

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A PROSPECTIVE POLICY ANALYSIS OF DEGREE GRANTING IN ALBERTA COMMUNITY COLLEGES

SUBMITTED BY HEATHER LYNN MONTGOMERIE IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSPHY IN EDUCATIONAL ADMINISTRATION.

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Date: April 9, 1990

DEDICATION

To my mother Hazel Watson McKenzie

ABSTRACT

This study consists of a prospective policy analysis of the issue of extending degree granting capability to the community colleges within the Province of Alberta. The purpose of the study was to determine if extension of degree granting capability to these colleges is a feasible policy solution to meet the perceived need to increase access to baccalaureate education in Alberta, or if other solutions are more desirable and feasible. The study relates the perceptions and positions of key policy stakeholders in describing the issue, and in determining policy recommendations.

The study was conducted as a qualitative case study, utilizing a conceptual model which incorporates Dunn's (1981) Model of Policy Formation, Mitchell's (1981) Legislative Decision Model of Policy Formation, and interest group theory. Data collection occurred through semi-structured interviews of policy stakeholders and through document analysis. Coding categories for data reporting, content analysis and comparative analysis were developed. An analytical framework was developed to describe possible policy options and to analyze the acceptability of each option in the perceptions of the stakeholders. A rating scale was developed to determine the most acceptable and feasible policy option.

The major conclusion of the study is that access to baccalaureate programming in Alberta is a significant policy issue. Extension of degree granting capability to the community colleges was not seen as a desirable or feasible policy solution by the majority of the stakeholders. Provision of complete undergraduate degree programs in at least some of the community colleges was seen as both a desirable and feasible policy solution. The policy approach determined to be most acceptable to the stakeholders and therefore the most feasible policy solution, was joint college-university provision of selected baccalaureate programs in community colleges. In this approach, the community college would retain responsibility for the first two years of the baccalaureate program while the universities would retain responsibility for the final two years of the program and for granting the degree. Recommendations for implementation include establishment of on-line access and interlibrary loans between university and college library systems and establishment of an inter-institutional advisory committee to ensure that standards and equitable provision of services and programs are maintained.

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A study of this nature is not possible to conduct without the willing participation, direct involvement, and support of others.

My sincere thanks to the individuals who participated in the study for their willingness to share their considerable knowledge and expertise during interview, and in providing additional information beyond the interview requirements.

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CHAPTER 1
OVERVIEW OF THE STUDY

Traditionally, the authority to grant a degree in Canada has been limited to universities. This authority has resulted in university control of the extent of degree program provision within the provinces. Dissatisfaction with the level of accessibility to baccalaureate degree programs is growing. The requirement in the majority of baccalaureate degree programs for on-site attendance at the degree granting institution is increasingly unacceptable. The demand for baccalaureate programs, and the need to develop policy responses to accommodate this demand is a worldwide phenomenon. Appropriate policy responses to this demand are a point of controversy. Different countries have enacted very different solutions; each implemented solution has been both applauded and criticized.

The level of demand for extending the provision of baccalaureate degree programs, and identification of a growing need to increase the numbers of individuals with baccalaureate degrees has created pressure on most provincial governments to reconsider the present system of provision of these programs. Limited policy changes have been enacted in some provinces. Approval of degree granting authority for private colleges has been approved by the legislatures in Ontario, British Columbia, and Alberta. Demand for improved access to degree programs, particularly in those regions without universities, has continued to rise despite this extension of degree granting authority.

The demand and need for baccalaureate education is in part a direct result of the major social and economic changes occurring in all western industrialized countries. The transformation of these societies from a manufacturing industry and resource exploitation-based economy to an economy reliant on information-based industries has created new categories of occupations, increased structural unemployment, and increased the demand for development and dissemination of knowledge and technology. There is considerable controversy regarding the appropriate level of higher education to best meet the needs of this changing society. University education is seen by many as the best mechanism for providing a solid basis of general and specific knowledge and skills which will provide individuals with flexibility and adaptability throughout their lifetime. As well, such education is seen to provide maximal economic and social benefits to society, particularly in job and career training, developing critical thinking skills, and in developing cultural values which contribute to a "higher level" of society (Opinion Research Index, 1981, pp. 3-4). On the other hand, technical, occupational and general education programs in technical institutes and colleges are seen as responding more quickly to the current needs of employers and occupational groups both in implementing new program offerings, and in adapting occupational program content and skills (Arlton & Kalikow, 1986, p. 385).

In Alberta, the changing social and economic environment has created a government focus on the need for change in the post-secondary educational system, in order to ensure that individuals are prepared to meet the requirements of the changing occupational roles, and to provide individuals with knowledge and skills to function effectively in the society of the future. In *Strategic Planning for Post-Secondary Education* (Alberta Advanced Education, 1985, p. 3), the government outlines the need to ensure that the post-secondary educational system can adapt to these changing circumstances. The government view is that re-orientation, restructure, and an internal reallocation of resources are required to increase the cost-effectiveness of post-secondary education in the province. Emphasis is placed on the need for comprehensive involvement of a wide range of stakeholder groups in further development of the post-secondary system.

The history of development of the post-secondary educational system in Alberta demonstrates that incremental government policies and directives are often attributable to the persistent lobbying of regional institutions and their publics (Berghofer & Vladicka, 1980, p. 50). Despite governmental focus on diversity in educational services, demand for degree granting institutions and/or extension of local university programming to degree certification levels is consistently expressed in regions not served in this manner.

The amendment to the Alberta Universities Act in 1984, establishing a process by which private colleges could obtain degree granting status, resulted in rapid development of approved degree programs by these colleges, and a significant expansion of enrollment in such programs. Private college undergraduate degree program enrollment is still a very small percentage of the overall enrollment in such programs in the province, and the ability of these colleges to grant degrees appears to have had little effect on public perceptions of increased access to baccalaureate programs. Controls on undergraduate enrollments were initiated at the University of Alberta and the University of Calgary in 1988. The resulting decrease in enrollment has increased public perceptions of lack of accessibility to these programs. The Government of Alberta approved funding to increase the enrollment capacity of university-transfer programs in the public colleges in 1988. The marked increase in university-transfer enrollments has subsequently created further issues in the postsecondary system. There is a growing concern that the universities will be unable to accommodate the expected numbers of transferring students in the third and fourth year of undergraduate programs. Although additional funding has been provided to the University of Lethbridge and Athabasca University to expand their ability to accommodate these students, public acceptance of these options is somewhat limited. The University of Alberta and the University of Calgary are viewed as the most prestigious universities in the province. The University of Lethbridge also has credibility and prestige, but its location in the far south of the province affects public perceptions of reasonable access and equity of opportunity in gaining access to degree programs. Athabasca University programs, although accepted as providing degree programs to individuals who cannot enroll in the traditional universities, are not the preferred degree program of large numbers of individuals, particularly those in the smaller urban areas. The credibility of an Athabasca degree and the distance education delivery system are a point of controversy in the province, and not seen as an adequate means to meet the need for such education.

There is growing controversy over the effects of continuing expansion of enrollments in the universities, and the resultant quality of education provided, as well as the potential detrimental effects on the research and service functions of the universities. Extension of degree granting capability to the public colleges, particularly those which have offered two years of university-transfer programs in a wide variety of disciplines for a considerable period of time, has been suggested by some colleges as the solution to the issue of increasing baccalaureate program provision. The desirability and feasibility of this proposed solution is a point of controversy in the province. The need to examine the current system of provision of baccalaureate degree programs, and to consider changes in this system, has become increasingly evident as applications to, and enrollments in, such programs have continued to increase, and as the two major universities have begun to consider control of enrollments in the third and fourth years of undergraduate programs.

PURPOSE OF THE STUDY

The purpose of this study was to conduct a prospective policy analysis to determine if extension of degree granting capability to the public colleges is a feasible policy solution to the perceived need to increase access to baccalaureate education in Alberta, or if other solutions are seen as more desirable and feasible.

The study describes the perceptions and positions of key policy stakeholders in Alberta regarding the need to increase access to baccalaureate programs; the major factors creating or affecting perceptions of the need to increase the availability of complete baccalaureate degree programs; the desirability and feasibility of extending degree granting capability to the public colleges; the desirability and feasibility of other mechanisms or policy solutions to increase access to, and/or availability of baccalaureate degree programs in Alberta; and the most acceptable policy solutions to this issue. Recommendations for policy formation were developed from the findings.

RESEARCH QUESTIONS

Specifically, the study addressed the following questions:

1. How significant is the issue of extending baccalaureate degree program provision in Alberta?
    a. What factors are contributing to the increased demand for these programs?
    b. Is there a need to increase enrollment capacity?
    c. Is there a need to extend provision of complete degree programs beyond the universities and private colleges?
    d. What factors affect resolution of this issue?
2. Is extension of degree granting capability to the public colleges a desirable or feasible policy solution?
3. Are there other policy solutions which could resolve this issue?
4. Which policy solutions appear to be the most acceptable to the stakeholders?

SIGNIFICANCE OF THE STUDY

The study should contribute to the base of knowledge concerning the effectiveness of issue clarification and assessment of potential resolution strategies by key interest groups prior to policy development. If a policy regarding extension of degree granting programs is developed in Alberta, this study should add support to, or diminish support for, the theories that link assessment of key stakeholder positions to successful policy implementation.

The study also contributes to further understanding of the factors creating policy issues, deepens our understanding of the process of problem structuring, and extends knowledge as to the utility of both the Dunn and Mitchell models of policy formation.

The development of the factor rating scale to assess acceptability to the stakeholders of proposed policy solutions should contribute to the development of methodologies in feasibility assessment, by provision of a model which can be adapted to other policy issues. The rating scale should also assist policymakers in determining the validity, reliability, and credibility of the study recommendations, and provide a model which can be adapted and changed to reflect the decision-makers' priorities in determining the most feasible policy solution.

Through the description of the institutional and regional viewpoints on this issue, the identification of potential solutions, and predicted consequences and outcomes, both the postsecondary institutions in the study, and the Department of Advanced Education should be assisted in policy development and long-range planning. In addition, further understanding of the system culture, and the elements of regional and institutional perspectives on postsecondary education, should contribute to more effective system management.

RESEARCH FRAMEWORK

Prospective policy analysis concepts form the conceptual framework used in this study. The study is designed as a qualitative case study of key stakeholders (legitimate interest groups) in the postsecondary system of Alberta. These key stakeholders were defined as representatives of: the public community colleges which offer two years of university-transfer programs in a wide variety of disciplines; the four universities; and the Department of Advanced Education. A model for prospective policy analysis was developed which incorporates Mitchell's (1981) Legislative Decision Model of Policy Formation, Dunn's (1981) Model of Policy Formation, and interest group theory.

Data were gathered by semi-structured interviews and document analysis. Data analysis procedures incorporate content analysis, comparative analysis, a modified assumptional analysis procedure, and feasibility assessment. The study findings are reported through description and analysis of the data collected, and through an analysis of the feasible and non-feasible policy options within the study context. Specific recommendations of the most acceptable policy solution to the issue of increasing access and availability of undergraduate degree programs, and considerations in implementing this solution are provided.

ASSUMPTIONS

The major assumption of this study is that the issue of extending degree program provision is a vital issue in the political context of future development of the post-secondary educational system in Alberta, which must be resolved in the near future to prevent further conflict and disruption in the system and its services.

A second assumption underlying the study is that the perceptions of the key stakeholders and data contained in published and non-published documents are the most valid of the available sources in determining the nature of the issue, the key factors affecting resolution of the issue, and identification of economically and politically viable solutions to resolve the issue.

A third assumption is that the institutional spokespersons provided verbal and written data which are accurate descriptions of the institutional perspectives on the issue, i.e., the institutional position, potential solutions, and likely institutional reactions to alternative solutions.

DELIMITATIONS

This study is delimited by the fact that it is focused on the Alberta postsecondary system, and more specifically on specific institutions within that system. Therefore, it must be interpreted in a particular political, social, economic and temporal context.

Secondly, the focus of the investigation is on one political issue. The description of the major components of the issue and identification of potential resolution strategies through development and analysis of policy alternatives may prove to be adaptable to investigation of other issues in the post-secondary system. No such generalization is claimed in the study, however.

LIMITATIONS

The main limitations of this study relate to the reliance upon a single researcher to conduct the study, the case study approach, and the restriction of data sources to key stakeholders and obtainable documents. The small sample size and the non-participation of one major stakeholder in the study may bias the findings. A further limitation is the perceptual nature of data obtained both through interviews. An issue examination by key interest groups may result in data which is biased in terms of the beliefs or perceptions of the general population. Incomplete presentation of data may occur through selection of information presented in order to foster a particular point of view. All documentation related to the issue may not have been made be available to the researcher. The modifications to the Assumptional Analysis technique which restricted application of this technique to the available data may decrease the validity and reliability of the data analysis, and subsequent policy recommendations.

DEFINITIONS

A number of common terms used in the education literature are defined as to their specific application in the proposed study. The terms have been placed in alphabetical order.

Accredited Private Colleges: A college incorporated under a private Act of the Legislature that has entered into an affiliation agreement with an established university to provide instruction in courses acceptable to that university as credit towards an academic degree; and designated under the Universities Act (1984) as an institution that may grant a baccalaureate (Universities' Act, 1984, Part 3, Section 1(h)).

Community college: A locally oriented, non-degree post-secondary institution offering general and specialized programs for full-time and part-time studies. In Alberta, these institutions provide two year university-transfer studies, and two to three year diploma or certificate programs in career, trades and vocation programs, and community service programs (Advanced Education, 1986, p. 51).

Community Consortia: Regional groups of established post-secondary institutions which provide ongoing credit programs on an outreach or distance education basis, leading to a certificate, diploma, or degree in regions of the province without post-secondary institutions (Advanced Education, 1986, p. 52).

Junior college:	An institution whose program of studies primarily consists of the first year or two of studies leading to a baccalaureate degree given elsewhere (Campbell, p. 5).
Key informant:	A person identified as having expertise or possessing substantial knowledge in a particular area or topic.
Key stakeholder:	An organization, agency or individual involved in or directly affected by an by an issue or concern (Borg & Gall, 1983, p. 750).
Legitimised Interest Groups:	Interest groups who have a statutory or conventional right to be consulted by government before policies are authorized (Kogan, 1975, p. 75). In this study, these groups are viewed as the key stakeholders.
Private Colleges:	An institution operated under the auspices of a private organization (usually a religious organization) which offers a broad range of programs including high school, career, university-transfer, and degrees in divinity. Only accredited private colleges may offer university-transfer programming in Alberta.
Postsecondary:	Refers to all post-high school institutions, consisting of both degree-granting and non-degree granting institutions (Campbell, 1974, p. 5). In Alberta, post-secondary institutions include universities, community colleges, private colleges, vocational centers, technical institutes, hospital-based schools of nursing, and community consortia.

Stakeholders: Individuals or groups who have a stake in policy or issue resolution because they affect and are affected by government decisions (Dunn, 1981, p. 60).

Technical Institutes: Institutions established under the Technical Institutes Act to provide training that is directly employment related (Advanced Education, 1986, p. 51). One to two year technical, business, and applied arts programs are provided, as well as apprenticeship training, and continuing education in technologies related to engineering and the natural sciences, business and commerce, service occupations, and industrial and commercial trades. No university-transfer programming is provided, although cooperative programs in engineering technology exist between the technical institutes and the Universities of Alberta and Calgary (Dupre, 1987, p. 13).

Universities: Degree-granting institutions with a prime responsibility for research, teaching and provision of community service through continuing education programming (Alberta Advanced Education, 1985, p. 5). In Alberta, there are four such institutions.

University transfer: Courses offered in a non-university institution which are accepted by an established university for advanced credit towards completion of a baccalaureate degree (Private Colleges Accreditation Board, 1987, p. 7).

ORGANIZATION OF THE THESIS

This study describes the perceptions and positions of key policy stakeholders as to the need to increase the provision of baccalaureate degree programs in the province; assesses the desirability, acceptability, and feasibility of extension of degree granting capability to the public colleges; explores possible alternative solutions and projected stakeholder responses to these solutions; and provides recommendations for policy formation based on the findings.

Chapter Two establishes the general policy context for the study through review of the relevant literature. Policy analysis and policy research is discussed with a particular focus on prospective policy analysis. The discussion of the policy environment surrounding baccalaureate degree programs and degree granting authority includes a description of the structures for provision of university education in Canada. The rising demand and need for baccalaureate education, and the opposing views regarding the desirability and need to increase access to these programs is explored. Structures for provision of university education in other countries; and models for extending the provision of degree programs are described. The final section of the chapter describes the postsecondary education system in Alberta, and the Alberta Government position on accessibility to postsecondary education.

Chapter Three defines and describes the conceptual framework, research design, and data collection and analysis procedures and techniques used in conducting the study. The chapter includes a description of the research process, the decisions made during the study, and the methods used to enhance the reliability and validity of the study.

Chapter Four provides a historical and current overview of the policy context in Alberta. Chapter Five describes the perspectives of the selected college respondents;

Chapter Six describes the perspectives of the university respondents, and the respondents for the Department of Advanced Education.

Chapter Seven initially provides a summary of the major findings evident in assessing the perspectives of all three stakeholder groups, and identifies commonalities and variations in perspectives. Possible models through which degree programs could be extended are identified. The analysis process used to determine acceptability of these models in the Alberta context, and to identify the most acceptable models to the stakeholders, are described. A recommendation for implementation of a specific model of degree program extension concludes the chapter.

Chapter Eight summarizes the study, discusses usefulness of the study design and research techniques, and suggest some areas for further research.

CHAPTER 2

REVIEW OF THE LITERATURE

This chapter initially provides an overview and description of the field of policy analysis as a background to the development of the research framework utilized in the study. The major factors forming the context for issue analysis are then discussed, beginning with a discussion of undergraduate degree granting structures, and undergraduate program designs in Canada and other western countries. The structure of postsecondary education in Alberta, with particular emphasis on institutional provision of university education programs, is then described. The factors underlying the increasing demand for undergraduate education are discussed, along with a description of the varying perspectives regarding the demand and need for such education. A description and discussion of models for extending provision of degree granting programs follows. A brief summary of the literature review concludes the chapter.

POLICY ANALYSIS

A policy is "first and foremost a program of action or non-action pursued in response to a particular problem or issue" (Jackson and Jackson, 1988, p. 565). An issue exists when the purposes or operations of an organization are unsettled, in dispute, or in a state of turbulence; or when various environmental factors are seen to constrain organizational ability to implement desired operational modifications (Ingram, 1987, p. 51). Public policy is developed within a context of societal expectations and constraints, and involves purposive, collective action directed toward the solution of a societal problem or resolution of a common issue.

Hogwood and Gunn (1984) define policy analysis as

> Determining the characteristics of the issue being analyzed and the organizational and political setting of the issue ... While policy analysis cannot of itself resolve value conflicts or determine political priorities, analysis can inform choices even about high-level strategic decisions.
>
> The potential contribution of policy analysis is probably greatest at the middle level of analysis, where a problem is currently ill-defined or poorly measured, where there are a number of actual or potential policy interests, and where the issue does not fit neatly into a single organizational responsibility. (pp. 263-264)

There are three major forms or types of policy analysis: prospective policy analysis which describes and analyzes information relevant to policy formation prior to policy action; retrospective analysis which analyzes policy information after a policy has been initiated; and integrated policy analysis which describes and analyzes information both before and after policy action (Dunn, 1981, pp. 51-54).

This study of the extension of degree granting capability to the public colleges in Alberta is a prospective policy analysis. The specific purpose of this type of analysis is to assist decisionmakers in arriving at a policy decision, through providing a complete description of the issue, and identification of the implications of possible policy alternatives (Hogwood and Gunn, 1984, p. 27).

Current theory and research in policy analysis directed towards policy formation is reviewed in the remainder of this section.

Policy and Politics

Political activity can affect any stage of the policy process, when such activity is defined as the "interaction of competing interests, individuals or groups over the preferred formulation or outcome of a given policy issue" (Hartmark & Hines, 1986, p. 7). In higher education, patterns of stakeholder interaction and conflict concerning values, interests, goals, and perceived needs for higher education are "a driving force behind the policy process" (ibid.). Greer (1986, pp. 39-40) identifies four determinants of higher education policy which demonstrate the political nature of higher education policy formation:

1. The external socio-economic environment. Dramatic changes in higher education are more likely to be triggered by environmental demands than by internal system requirements.
2. The political environment. Past legislative norms concerning the importance of higher education's role in society have significant influence on higher education policy formulation and outcomes.
3. The structure of the higher education system. The number of actors with potentially divergent goals directly influences both the number of decisions, and the length of time needed for decision making on policy issues.
4. Personal factors. The attitudes, experiences, perceptions and actions of individual policymakers and stakeholders importantly affects policymaking by influencing policy outcomes.

Worth (1978) believes that policies "often stem from ill defined goals, alternatives are frequently ignored, superior choices tend to give way to the acceptable, and careful data analyses are displaced by expedient interpretations ... in the real world policy is apt to emerge from the interaction of groups and interests in a power relationship." Policy formation, then, involves a political process of conflict management and consensus building. Effectiveness of policy formation is enhanced by policy research which incorporates assessment of the political aspects of the issue, and proposed policy alternatives.

Policy Research

Policy research is "the process of conducting research on, or analysis of, a fundamental social problem in order to provide policy makers with pragmatic, action-oriented recommendations for alleviating the problem" (Majchrzak, 1984, p. 12). Policy research should include the identification of problems as well as the analysis of possible solutions and the evaluation of potential outcomes (Worth, 1978, p. 5).

> The major contribution of public policy research may be to yield insights, particularly with regard to what is possible in the way of solutions, and to serve as a powerful resource to the judgement, intuition, and experience of decision makers. By making information available and exposing hidden assumptions and value preferences, public policy analyses can widen the area of informed judgement and counter the purely subjective approaches of program advocates. This prevents the mere expression of personal opinions with general statements, thereby raising the quality of public discussion. (Kalisch & Kalisch, 1982, pp. 91-92)

Such research can occur in a variety of ways including examination of individual policies to determine what policy makers intended to accomplish and what actually was accomplished; examination of the process of policy development and implementation; or through extrapolation of future societal needs and potential problems which will require policy development, and identification of potential policy solutions to these problems. The latter form of policy research is generally called prospective policy analysis.

Prospective Policy Analysis

Prospective policy analysis involves the production and transformation of information prior to initiation of policy actions (Dunn, 1981, p. 51). Such analysis describes and determines relationships between phenomena, and identifies policy alternatives and preferences based on quantitative and qualitative data analysis to form a basis for policy decisions (W. Williams, 1971, cited in Dunn, 1981, p. 51). Prospective policy analysis can include the use of such techniques as problem-structuring, forecasting, feasibility assessment, scenario writing, and recommendation of preferred alternatives (p. 363). Problem structuring is the process of generating and testing conflicting definitions and explanations of a problem to form alternative conceptualizations of a problematic situation (Dunn, 1981, p. 119). Resolution of issues is dependent on examination of the conditions and problems which have contributed to development of an issue; development of alternative policies, programs, plans or courses of action which might resolve the issue; and feasibility testing of these alternatives in order to assist decision-makers in selecting an appropriate action (Ingram, 1987, p. 58; Dunn, 1981, p. 363).

Dunn's model of policy formation as applied to the process of prospective policy analysis is presented as Figure 1. The problem structuring phase consists of three interrelated processes: individual perceptions that a problematic situation or issue exists (*problem sensing*); definition of the problem in basic and general terms (*problem conceptualization*); and development of a detailed and specific definition of the problem (*problem specification*).

Forecasting policy alternatives aims to "provide information about future changes in policies and their consequences" (p. 142). This phase includes consideration of values, goals and objectives, and "development of assumptions or data to estimate the consequences of existing or new policies, the content of new policies, or the behavior of stakeholders in response to proposed policies" (p. 147). The end result of forecasting is the development of feasible policy alternatives.

Recommending policy solutions involves specification of "the likelihood that a particular course of action will result in consequences that are valuable to some individual, group or society ... (that is, determining) which alternatives are most valuable and why" (pp. 219-220). Recommending solutions includes assessment of objectives, costs, constraints, externalities, time, risk, and uncertainty for each proposed solution. Such information provides a basis on which decision-makers can determine policy.

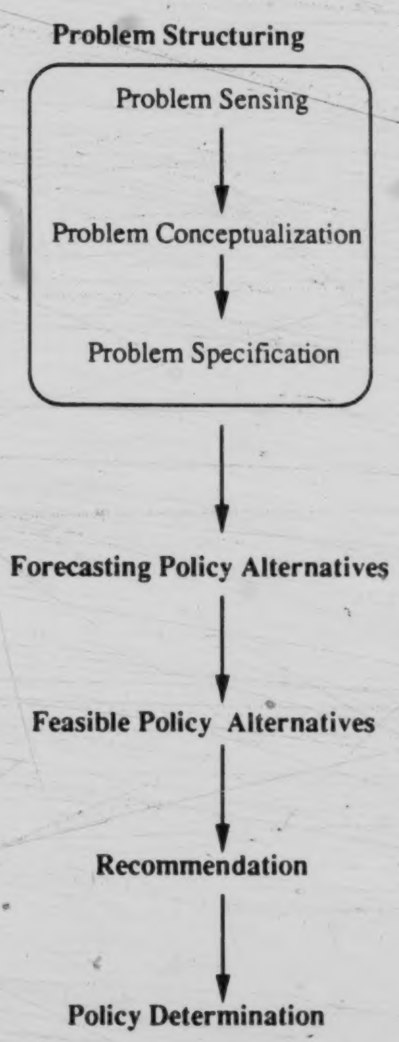
The policy formation process is dependent on the involvement of stakeholders, that is, those who affect and are affected by policy decisions; and by the policy environment, that is, the surrounding context of the policy issue.

Policy Stakeholders as Interest Groups

Interest group literature views policy-making as balancing the demands of interest groups, and successful policy formation as requiring assessment of the positions and strengths of interest groups. Certain interest groups have greater influence on policy formation on a consistent basis than do other groups. Kogan (1975, p. 75) defines these influential groups as *Legitimised Interest Groups*. Such groups include relevant government departments or agencies, institutions, and professional associations, but exclude the decision making body of government, the cabinet. These Legitimised Interest Groups are viewed as the key policy stakeholders in educational policy formation, and assessment of perceptions and positions of these groups is viewed as essential.

The conversion process of the political system, as described by Almond and Powell (1978, p. 14), reflects the concept of interest group involvement and influence in policy making. This conversion process is described as consisting of four functions: *interest articulation*, the expression of demands for policy change or continuation by interest groups or individuals; *interest aggregation*, when the variety of demands are coalesced into major policy alternatives; *policy making* by authoritative political powers; and *policy implementation* by interest groups and bureaucratic agencies.

DUNN'S MODEL OF POLICY FORMATION


Problem Structuring
Problem Sensing
Problem Conceptualization
Problem Specification
Forecasting Policy Alternatives
Feasible Policy Alternatives
Recommendation
Policy Determination

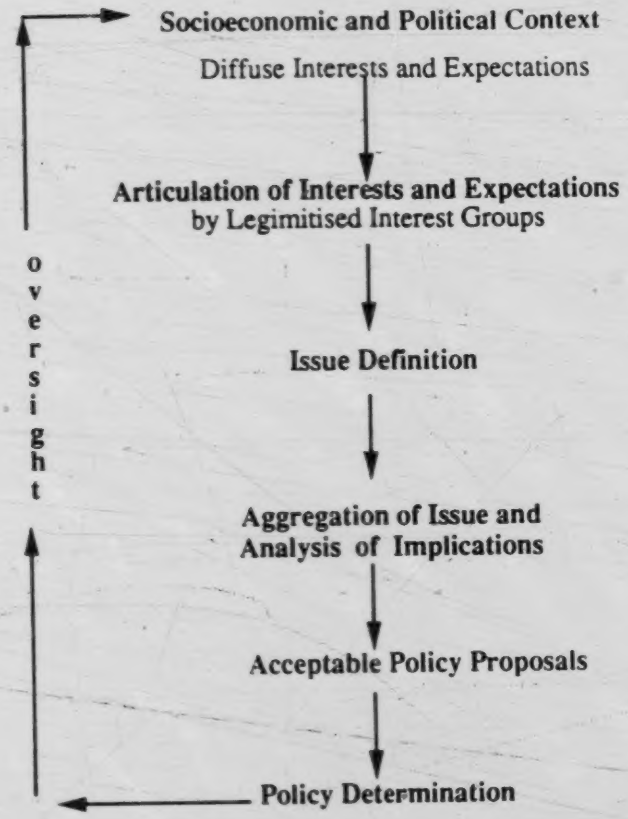
Adapted from: Dunn, W.N. (1981). *Public Policy Analysis*. Englewood Cliffs, NJ: Prenctice Hall. p. 48

Figure 1

Mitchell (1981), in his study of legislative decision making, provides further insight into the application of interest group theory to policy formation analysis. Legislative policies originate through political and personal interests and demands which are "diverse, incessant, intense, difficult to clearly identify, and difficult to determine legitimacy for policy intervention" (p. 21). Mitchell describes four basic stages of public policy formation (pp. 32-42). The first stage is *Interest Articulation.*. This stage incorporates identification of the specific interest groups which will be affected by a policy decision, and those interest groups who must be involved in the process for political reasons. As well, possible forms of action are identified, and support and opposition to these possible proposals by the legitimate interest groups are described. A clear definition of the issue should be the end result. The second stage is *Interest Aggregation*, in which alternative policy proposals are screened to determine which proposals are acceptable to broadly representative groups, and which lack adequate support to justify action. The third stage, *Interest Allocation*, involves determination of the impact of the acceptable policy proposals on budget allocations, and overall goals of the government in the policy area. *Policy Determination and Implementation* are the outcomes of the allocation stage. The final stage identified by Mitchell is *Oversight* in which evaluation of the performance of the established policy is conducted, providing a basis for rearticulating interests when the implemented policy outcomes are unsatisfactory. Mitchell's model of policy formation is presented in Figure 2.

The two models of policy formation developed by Dunn and Mitchell are complementary. Both approaches involve assessment of key policy stakeholders in determining the nature of the issue and possible policy solutions prior to policy determination. Problem structuring corresponds to the processes of issue articulation and definition. Forecasting policy alternatives and identifying feasible alternatives involve the use of techniques to determine interest aggregation and allocation. Both models call for

MITCHELL'S MODEL OF POLICY FORMATION


Socioeconomic and Political Context
Diffuse Interests and Expectations
Articulation of Interests and Expectations
by Legimitised Interest Groups
Issue Definition
Aggregation of Issue and
Analysis of Implications
Acceptable Policy Proposals
Policy Determination
oversight

Adapted from Mitchell, D. E. (1981). *Shaping Legislative Decisions: Education Policy and the Social Sciences.*. Lexington: D. C. Heath. p. 23

Figure 2

recommendation of acceptable policy solutions based on analysis of key stakeholder positions as the base for policy determination.

The external socio-economic environment, the political environment, the structure of the higher education system, previous policies and their effects, and the perceptions and experiences of policymakers and stakeholders are major factors affecting the development and current status of the issue of provision of undergraduate degree education. Examination of these factors is essential to the problem structuring (issue identification and articulation) phase of the study. Environmental factors which impact on this issue include degree granting structures and policies in Canada and other western countries as well as in Alberta, socio-economic developments worldwide which directly affect both demand and economic need for such education, and the perspectives of a wide variety of individuals regarding appropriate resolution of this issue.

POSTSECONDARY EDUCATION IN CANADA

Prior to World War II, higher education in Canada reflected the British model of higher education. Universities tended to be small, highly selective in student admission, elitist in curricular design, and relatively autonomous. Other higher education institutions were established under direct provincial and public control to provide occupational, vocational and agricultural education. In the United States, a more egalitarian and democratic model of higher education emerged, with universities established under the British model but coupled with development of multipurpose, highly accessible, alternative institutions, providing university occupational, vocational, agricultural and general interest education (Dennison, 1984, p. 141). A North American viewpoint of the purpose and social role of higher education began to influence the public and political views of the higher education system in Canada. Thus, both the traditional model, and the American model of higher education are apparent in the development of the postsecondary educational system in Canada.

Control of Degree Granting Status

In Canada, control of degree granting status through accreditation and licensure is a direct responsibility of the provincial governments, and granting approval of such status requires a provincial Act of Legislature. Professional associations exist which evaluate programs according to set standards, but these accreditations are not required for government approval of degree granting status (Dennison, 1986, p. 260). Degree granting status is restricted in all provinces to a few institutions, primarily public universities. Provinces vary in the control and regulation of out-of-province and foreign institutions providing degree programs in the province, and in approval of private colleges as degree granting institutions. Canada is unique in the Western world in requiring legislative approval of degree granting institutions. The United States, United Kingdom, and Australia do not require such approval in order for institutions to grant degrees (Skolnick, 1987, p. 23); degree approval in these countries is commonly achieved through accreditation agencies.

Provision of University Degree Programs

In Canada, universities and a few private colleges, offer degrees; all other postsecondary institutions confer diplomas as the terminal certification for programs (Cameron, 1987, p. 3). This distinction initially was developed in order to increase the economy of scale, efficiency, and maintenance of standards in university level education through concentrating resources in a few institutions. With the expansion of postsecondary education institutions following the second World War, Canadian universities were successful in convincing the provincial governments that degree granting programs should remain exclusively under university control (Skolnick, 1987, p. 25).

Status of institutions and perceptions of university level education as the "best" education are direct results of this structure of the Canadian postsecondary educational system (Dennison, 1984, pp. 142-143). Differing views of the right of access to postsecondary education, and variations in the influence of the American model of junior and community colleges on perception of college roles underlie the differences in provincial college systems (Gregor, 1979, p. 36). Regional differences in the roles and status of private colleges also reflect these variations in philosophy.

Universities

Universities in Canada are primarily public "multi-versities" with three major functions: research, teaching, and dissemination of knowledge (Athabasca University, 1977, Sect II, p. 2). These institutions grant baccalaureate, master's, and doctoral degrees in a wide range of traditional academic and professional disciplines. A few universities in Canada have been created as solely undergraduate institutions, with a primary emphasis on teaching at the baccalaureate level in traditional academic and some professional disciplines (pp. 1-2). Athabasca University in Alberta and the Open Learning Institute of British Columbia have mandates to provide undergraduate degree programs to adults on an open admission basis, in areas outside a central campus (University of Alberta Senate, 1986, p. 7). These universities provide both classroom-based and distance education approaches to course provision. Overall, two basic features distinguish universities in Canada from other postsecondary educational institutions: they hold legal authority to grant degrees and they hold primary responsibility for research to acquire new knowledge.

Although university-level education has, for the most part, been provided by universities, alternate ways to obtain initial degree courses or complete degree programs have existed since the establishment of postsecondary educational institutions in Canada.

Historical Alternatives to Universities

College Classique

Designed as private, fee-paying institutions, these regional and urban colleges offered four years of secondary schooling, and four years of undergraduate degree level education in arts. On completion of College Classique courses, the degree was awarded by one of the French language universities: Université de Montreal à Laval, or Université de Sherbrooke (Canadian Encyclopedia, 1988, p. 459). This form of providing baccalaureate education outside the universities was unique to French-speaking Canada. In 1967, there were ninety-eight such colleges in Quebec. In 1968, the majority of the Colleges Classique were converted to Colleges d'Enseignment Général et Professional (CEGEP), the Quebec form of community colleges; the remainder were closed.

Affiliated Colleges

Affiliated colleges were established in Ontario, Manitoba, Saskatchewan, Alberta, and British Columbia very early in the history of higher education in Canada. Such colleges offered the first two years of a Bachelor of Arts or Bachelor of Science degree in affiliation with a particular university. The affiliated college concept was maintained and expanded as new universities were created; some affiliated colleges became universities in their own right. The affiliated college model still exists today in those provinces which have community college transfer programs (Harris, 1976, p. 372).

University Colleges

An integral part of the formation of the University of Toronto was the creation of colleges offering full degree programs under the control of the university. The university held ultimate responsibility, and therefore some control over the degree programs offered

(Bissell, 1974, p. 60). The university college model was extended in 1959, by an act of the Ontario Legislature which created York University College as an affiliate of the University of Toronto for a minimum of four years and a maximum of eight years, and mandated conversion of the college to York University at the end of that time (pp. 67, 68). York University was given legislative approval as an independent university in 1965.

University Colleges were also created in Newfoundland and Nova Scotia. Memorial University College in Newfoundland initially offered the first two years of Arts and Science degree programs and one year of teaching training, as an affiliate of Dalhousie University. Over time, additional courses were added and in 1949, the College became Memorial University. The University College of Cape Breton was founded in 1974 by the amalgamation of the Sydney campus of St. Francis Xavier University and the Nova Scotia Institute of Technology. This college obtained degree granting status in 1982 but did not change to university status. The college continues to offer both degree and diploma level education (Canadian Encyclopedia, 1988, p. 2220).

In 1989, the government of British Columbia authorized the creation of four year degree programs at regional community colleges, notably Okanagan College and Cariboo College. Distinct departments for university degree studies, defined by the government as university colleges, have been created in each college. Initially, these university college programs will offer Bachelor of Arts, Bachelor of Science, and Bachelor of Nursing studies. Degrees in these programs are awarded by the University of Victoria or the University of British Columbia.

Private Colleges

Relatively few private colleges exist in Canada. The few that do exist primarily offer degrees in divinity, vocational training, and high school programs (MacKinnon, 1988, p. 1). Private colleges in some provinces offer university level courses transferable to provincial universities. Selected private colleges in Nova Scotia, Alberta, and British Columbia have authority to grant baccalaureate degrees in disciplines other than theology (Skolnick, 1987, pp. 80-81). In Ontario, British Columbia, and Alberta, private church-affiliated colleges have recently received approval to grant secular degrees. Trinity Western College in British Columbia received approval to grant degrees in 1985 (p. 70). The Institute for Christian Studies received approval to grant degrees in Ontario in 1986. The degrees offered by these two institutions are recognized by almost all major universities in the world but not by Ontario or British Columbia universities (p. 73). The Alberta decision is an amendment to the Universities' Act which applies to all private colleges (pp. 13-16). Three and four year baccalaureate degrees are awarded by these colleges. These degrees are recognized by all universities in Canada.

Other Institutions Offering Degree Education

Business and Industry

Corporations are increasingly involved in the training and retraining of their employees as "they have realized that often they can provide this training more conveniently, more efficiently, and more inexpensively than traditional education" (Arlton & Kalikow, 1986, p. 381). Some of these corporations are currently expanding their training into accredited degree granting programs. Bell Canada, General Motors, the Insurance Corporation of British Columbia, and the large trade unions have established training and educational programs in Canada to meet the needs of their employees or members. At present, these programs usually result in a certificate or diploma as the means of formal recognition. General Motors, however, does provide a Master of Science in Manufacturing Management to GM employees in Oshawa (Skolnick, 1987, p. 76).

Out-Of-Country Institutions

The expansion of programs offered by United States postsecondary institutions in Canada is becoming a major issue in Canadian postsecondary education. At present these programs tend to be primarily Master of Education programs with lower admission requirements than Canadian institutions, and use non-traditional programming approaches. Such programs are achieving sufficient enrollments to ensure economic feasibility for these American institutions. Further expansion of programs at both the masters and baccalaureate level by these institutions is expected to occur. Most provinces approve these programs based on U.S. accreditation of the institution, and demonstration that the program offered will meet community needs not being met at other universities (Morissette, 1985, p. 9). In 1983, the Ontario government established a Degree Granting Act to regulate the operation of out-of-province degree granting institutions. This law established that an American institution offering degrees in Ontario must be accredited by an appropriate United States accreditation agency and must provide a program not likely to be offered by an Ontario university (Skolnick, 1987, p. 75). In practice, such institutions have been authorized to offer programs in regional areas where Ontario university programs do not presently exist. Although most of the American degree programs are recognized by almost all American universities and some Canadian universities, including McGill, British Columbia and Ontario universities in particular do not recognize these degrees (Skolnick, 1987, p. 71).

Non-Traditional Canadian Institutions

Degree granting programs have also been created by non-traditional Canadian educational institutions and agencies. Northland Open University in Ontario functions under the authority of the Government of Canada, without corresponding provincial legislation to grant a degree (p. 72). This university offers baccalaureate education through distance delivery in several provinces, including Ontario. Ryerson Polytechnical Institute is the only degree granting polytechnic in Canada, and offers Bachelor of Technology and Bachelor of Applied Arts degrees in several disciplines.

Provision of Non-Degree Granting University Education

Public Colleges

Campbell defines three categories of public college systems in Canada (1975, p. 55). The unitary system exists in Quebec, where the community college exists as one level within the total provincial educational system, providing initial university level programming, and occupational, technical and vocational programs. Universities in Quebec do not provide junior undergraduate programming. The binary system exists in Manitoba, Ontario and the Maritime Provinces. In these provinces, community colleges are mandated to provide only non-university level vocational and technical programming. Ternary systems exist in British Columbia and Alberta. In this system, universities, colleges, technical and vocational colleges form three distinct, but coordinated aspects of the postsecondary system. University level courses and university-transfer programs are an identified role of the community colleges, in addition to occupational and general education. In these provinces, universities offer all years of undergraduate programming, but accept some college and technical institute courses for advanced credit in undergraduate programs.

University Transfer Programs and Credits

An alternative approach to obtaining university level education in most provinces of Canada has been through transfer of students between colleges and universities, and granting of advanced credit for coursework completed in colleges, whether or not the overall system design was intended to provide this access (Mowat, 1974, p. 138). This alternative approach to university education reflects a political response to the recognition of

> both the intrinsic and economic values of higher education... and the public view of the definite link between the level of educational achievement and the quality of life.... this view promoted the spread of public conviction that obtaining a postsecondary education was a public right. (p. 144)

Universities have maintained control in most provinces as to what courses are acceptable for advanced credit. Little transfer capability exists for courses or programs which focus on occupational or technological preparation. In provinces which support university-transfer courses and programs as part of community college operations, transfer provisions are not as great an issue, although conflict and controversy still occur. A generally higher rate of college and university participation exists in provinces which do have university-transfer provisions (Guppy, 1988, p. 16).

Increasing dissent and conflict over university-transfer credit for community college programming is occurring in provinces with binary and ternary systems (Gregor, 1979, p. 42). Issues such as the quality of transfer programming, the actual need of society for more baccalaureate prepared individuals, and the constraints of university funding all contribute to the conflict. These issues are further discussed later in the chapter.

Current Government Reviews of Degree Granting Privileges

In 1986, the Ontario Government began a review of its policy of non-extension of degree granting status to Ontario institutions, based on public representations that,

> at present, institutions of higher education that depart from the majority cultural model are ... treated as unwelcome intruders. A tolerance of private degree granting institutions is appropriate for a pluralistic society.

> Previous attempts to offer programs through affiliation with an existing university, rather than (private institutions) granting degrees proved ineffective as the existing universities were unreceptive. (Skolnick, 1987, p. 73)

Similar policy reviews are occurring in British Columbia and Alberta (Ministry of Advanced Education and Job Training, British Columbia, 1987; Alberta Advanced Education, 1988).

THE STRUCTURE OF POSTSECONDARY EDUCATION IN ALBERTA

Thirty public postsecondary educational institutions currently provide postsecondary education in Alberta. Four universities provide both undergraduate and graduate degree programs; eleven public community colleges provide a wide range of educational programs at the certificate and diploma level, as well as university-transfer courses and programs, trades apprenticeship programs, and community education programs.

Two technical institutes offer one- and two-year technology programs and apprenticeship programs. Five vocational centers provide upgrading and short term certificate programs. There are four hospital-based diploma nursing programs and two psychiatric nursing diploma programs. The remaining public institutions are the Banff Centre, and the Alberta Petroleum Industry Training Center. These all provide specialized programming at the certificate/diploma level (Dupre, 1987, p. 6).

Seventeen private colleges, incorporated under private Acts of the Legislature, are presently operating in Alberta. Three of these colleges have been granted legislative authority to offer undergraduate degrees in the Arts and Sciences, and also offer university-transfer courses in the pre-professional programs; several others are affiliated with universities to provide university-transfer courses and programs (MacKinnon, 1988, p. 3).

Provision of University Degree Programs

Athabasca University

Athabasca University was established in 1970 as an "open," distance learning university. The specialized mandate of this university is to increase access and equality of opportunity in university education for adult Canadians through the provision of degree programs in non-traditional ways (Alberta Career Development and Employment, 1989-90). The Athabasca University administrative center is located in Athabasca, with regional offices in Edmonton, Calgary, and Fort McMurray.

The University of Alberta

This university is the second largest university in Canada, and offers a full range of undergraduate and graduate degree programs in "virtually every field of study" (University of Alberta Facts and Figures 1988), on a full or part-time basis. It houses the second largest research library in Canada, and is "a major centre of higher education and research in the humanities, and in the social, physical and life sciences and their associated professions" (Dupre, 1987, p. 7). The university offers undergraduate programs between September and April yearly, in two academic terms, and in a limited number of programs in May/June, and July/August.

The University of Calgary

This university offers a "broad range of professional and liberal arts degree programs at the bachelor's, master's and doctoral levels (Alberta Advanced Education, 1985, p. 5).

The University of Lethbridge

Established in 1967, this university offers programs leading to six undergraduate degrees in Arts, Sciences, and Education, as well as a variety of professional transfer programs, and a new Master's degree in Education (Alberta Advanced Education, 1985, p. 5).

Provision of Off-Campus Programs

The University of Alberta, University of Calgary, and University of Lethbridge offer off-campus programs in a limited number of fields, with special emphasis on programming leading to a master's degree in education and a baccalaureate degree in nursing. These programs usually require students to take some of the courses on site at the home university.

Capstone Program

In 1988, the government approved establishment of a Capstone program offered jointly by Athabasca University and Keyano College leading to a baccalaureate degree in Arts, Administration, or General Studies. In this program, the first two years of university studies are offered by Keyano College. Some adjustments in the original university-transfer program offered by the college were required to implement this collaborative degree program. Athabasca University then provides two years of coursework leading to a Bachelor of Arts or Administration; or one year of coursework leading to a Bachelor of General Studies degree. All courses are offered on site at the college.

Private Colleges

Camrose Lutheran College, Concordia College, and The King's College presently have authority to offer three year Bachelor of Arts and three year Bachelor of Science degree programs. These colleges have received approval from the Private Colleges Accreditation Board to offer these programs. (This Board, and its functions and mandates, are discussed further in Chapter 4.) Additional university-transfer programs are offered by these colleges in affiliation with the University of Alberta.

Other Institutions Offering Degree Education

Northlands Open University (in Sherbrooke, Quebec) offers a distance education Bachelor of Commerce program in Alberta as well as in other provinces. The tuition fees for this program are $795.00 per semester of the three year program. Advanced credit for work completed in other postsecondary educational institutions is available.

Two American universities are offering degree programs in Alberta on a consistent basis. Golden Gate University offers degree programs in management to engineers in the Fort McMurray area. Gonzaga University of Spokane is offering on-site Masters of Education programs in Fort McMurray, Red Deer, and Medicine Hat. According to Dr. Terry Morrison, Chairman of the Alberta Council on Admissions and Transfer, these programs have extremely high tuition fees, and the quality of these programs is of concern to many of the university educators in the province (personal communication, September 22, 1988). Several other American universities do offer distance education programs to Albertans on an individual basis.

Provision of Courses and Programs Towards University Degrees

University Transfer Programs

University transfer programs and university-transfer courses offered by the public postsecondary institutions in Alberta are subject to review by the Alberta Council on Admissions and Transfer. (This Council and its mandate are discussed further in Chapter 4.) Six of the public community colleges in Alberta offer a full two years of university-transfer programs in both liberal arts and pre-professional disciplines: Grande Prairie Regional College, Grant MacEwan Community College, Keyano College, Medicine Hat College, Mount Royal College, and Red Deer College.

Lethbridge Community College offers no university-transfer programs; Olds College, Fairview College, Lakeland College, the Northern Alberta institute of Technology, and the Southern Alberta Institute of Technology offer one year or selected courses in limited areas for university-transfer.

Three private colleges also provide approved university-transfer programs in a number of disciplines. Canadian Union College in Lacombe and North American Baptist College in Edmonton have affiliation agreements with the University of Alberta, and St. Mary's College in Calgary has an affiliation agreement with the University of Calgary to offer university-transfer programs (MacKinnon, 1988, p. 77).

Consortia

Six Community Consortia composed of representatives of regional public postsecondary institutions provide university and non-university credit programs in outlying regions of Alberta. These consortia are: The Big Country Educational Consortium serving Drumheller, Hanna, Oyen, Three Hills, Youngston, Stettler and

Coronation; the Chinook Educational Consortium serving the Crowsnest Past, Pincher Creek, and Claresholm; the North Peace Adult Education Consortium serving Peace River, McLennon, Falher, Manning, and Valleyview; the Pembina Educational Consortium serving Drayton Valley, Whitecourt, and Rocky Mountain House; and the Yellowhead Region Educational Consortium serving Hinton, Edson, Jasper and Grande Cache.

Each consortium is responsible for determining which programs are required in its region and for arranging for institutions to bring those programs to the community either through on-site education or through use of distance education technology (Alberta Advanced Education Newsletter, May 1989).

As previously discussed, Alberta is one of the Canadian provinces currently reviewing the structures for provision of undergraduate degree education. A wide variety of factors and issues are contributing to the increased demand for such education.

DEMAND AND NEED FOR BACCALAUREATE EDUCATION

In the nineteen-sixties, provincial governments in Canada developed and implemented policies to facilitate access to higher education. These policies resulted in great expansion of the postsecondary educational system, substantially increased participation rates for all segments of Canadian society, and diversification of the student body in terms of social origin and male/female proportion (Pike, 1987, p. 4, Conseil Superior de l'Education, 1980, p. 66). The accessibility policies also increased the interest of diverse groups of Canadians in seeking the benefits of higher levels of education. Education at all levels is seen "as the means of increasing social equity, mobility, and equality of opportunity" (Watts, 1987, p. 3). The changes in the economy from rural and resource based to urban and industrialized tended to strengthen the view that postsecondary education provides opportunity for individual advancement, and has made postsecondary education a necessity for more and more Canadians (Duhamel, 1987, p. 15). In an increasingly competitive job market, individuals seek higher education credentials in order to improve their employment chances. A secondary effect of increased access and participation is the rising demand for access to higher levels of postsecondary education. As increasing numbers of Canadians obtain postsecondary education, the children of these individuals tend to seek a higher level of postsecondary credentials. In addition, adults who hold full time jobs tend to seek higher levels of education for themselves as time and circumstances dictate (Guppy, 1988, p.16).

Higher rates of postsecondary enrollment over the past two decades have occurred in the non-university institutions, primarily the community colleges. Universities have remained essentially the preserve of the more socially privileged segments of society (Fortin, 1987, p. 6; Pike, 1987, p. 5), even though

> Governments like to claim a university place will be available to every qualified applicant, that is, no qualified applicant should be denied a university place by virtue of geographic location, ability to pay, gender, race, age, or cultural factors. (Farquhar, 1987, p. 5)

In the early nineteen-eighties, the general downturn in the economy and the rise of unemployment levels, projections of declining postsecondary enrollments, and increased questioning of the ability of postsecondary educational institutions to meet societal needs led to control of further expansion of postsecondary educational institutions through reduction of government funding (Council of Ministers of Education, Canada, 1987, p. 7). This has happened despite government recognition that postsecondary education and university research are "important instruments contributing to international economic competitiveness and national prosperity" (Watts, 1987, p. 2) and despite the need to develop individuals to their maximal intellectual capacity (Groennings, 1988, p 472). University research and scholarship are seen as an investment in the development of knowledge which is essential to societal adaptiveness, growth, and vitality.

Demands for continuing financial restraint by governments, and demands for increased efficiency and accountability in postsecondary institutions often conflict with perceptions of the need to increase access to university programs. A number of questions arise in considering proposals to restructure the postsecondary system to meet the efficiency, accountability, and demand needs. What are the requirements for increased numbers of individuals prepared at all levels of postsecondary education? Specifically, is there a socio-economic need for greater numbers of individuals prepared at the baccalaureate level? What should be the roles and functions of the various types of postsecondary institutions in meeting these needs in the most adaptable, flexible, and cost-effective way? How can institutional effectiveness and the quality of education be improved? Many of the reform proposals resulting from current discussions and analyses are seen to limit accessibility to postsecondary education, particularly in the university sector and as such, do not address the issues of demand and need for degree programs within Canadian society.

Factors Affecting the Demand and Need

The Economy

All industrialized countries are experiencing slowed economic development, lower productivity rates, and major social changes caused by a transformation from an industrial society to a knowledge based society. These social and economic changes have currently reduced the requirements for traditional occupations, created new occupational groups, and exacerbated structural unemployment (Alberta Advanced Education, 1985, p. 16). Constant technological change has resulted in rapid obsolescence of specialized skills obtained through current education and training. The Organization for Economic Co-operation and Development states that postsecondary education is crucial to improving economic growth and development through research and development of skilled manpower

(1985, p. 85). The societal changes related to the proliferation of technology and dependency on information and knowledge necessitate higher levels of education for entry level jobs (Alberta Advanced Education, 1988, p. 11).

A recurring need for individuals to upgrade work-related skills and knowledge in order to maintain employment, and an increasing need to obtain higher education in order to effect career changes due to changing job structures is already in evidence. "Adults will be recycling in and out of formal programs as lifelong learning becomes a necessity" (p. 19). Access to postsecondary educational institutions is increasingly important in a knowledge society, and the socio-economic trends are increasing the demand for access to educational services on a decentralized part-time basis (p. 19; Schutze, 1987, p. 16). Currently, degree programs are seen as the most valuable form of postsecondary education to enhance career opportunities. If individuals prepared in technologies or trades become a major need in particular provincial economies, however, the demand for degree programs is seen as likely to decrease significantly for a period of time (Alberta Advanced Education, 1988, p. 9).

Demand for university programs is seen to be significantly affected by the current state of the economy. A major North American recession is projected to increase demand for such programs for a period of seven to ten years; a booming economy is predicted to decrease demand for full time enrollment in university programs due to the availability of job opportunities. A booming economy, however, may increase the demand for part-time degree studies (Alberta Advanced Education, 1988, p. 7).

Postsecondary Funding Levels

Restraint in governmental funding for postsecondary education reflects an expectation that postsecondary institutions will meet the changing economic and social needs with fewer dollars (Balderston, 1981, p. 52). The effects of these restraints are noted by Johnson (1985, p. 2) as causing a decline in library services, research equipment, and computer services which could lead to a decline in quality of both education and research within the postsecondary institutions. The main direct consequence of funding restraints has been the widespread limitation of enrollments, particularly in the university sector. Such limitation of enrollments is seen as essential to maintain high quality education. Such decisions by the universities may in fact maintain or further increase the social elitism of the Canadian universities. In British Columbia, the funding cutbacks in the early nineteen-eighties resulted in discontinuance of some university programs, including extension programs, and the closure of one college. Further limitation in postsecondary educational opportunities occurred, particularly for rural citizens (Pike, 1987, p. 20).

Demographic Factors and Participation Rates

Throughout North America, a downward trend in postsecondary educational enrollments began in the nineteen-seventies. Further decreases in enrollment were predicted due to the reduction in the eighteen to twenty-four year old age cohort which traditionally predominated postsecondary enrollments. This predicted reduction in enrollment levels did not occur. Postsecondary enrollments in universities and colleges rose from 513, 000 full time students in 1972-73 to 781,000 in 1985-86 in Canada, with an additional 16,000 enrolled on a part-time basis (Pike, 1987, p. 9). Part-time enrollments have increased by eighty-two percent since 1982; the vast majority of these students are "mature" (over age twenty-four), and women (Fortin, 1987, p. 6).

Several factors account for this steadily increasing enrollment pattern. Retention rates of students in high schools to the end of grade twelve is currently about eighty-five percent across Canada. Sixty-eight percent of these students obtain a high school diploma and are therefore eligible for participation in postsecondary education. Approximately fifty-three percent of high school graduates enrolled directly in colleges and universities in 1985 (Fortin, 1987, p. 4). This reflects a participation rate increase in university studies from approximately ten percent in the early seventies to approximately twenty-five percent in the mid-eighties.

Participation of women, particularly in undergraduate and professional education has increased from approximately thirty percent in 1968-69 to forty-eight percent in 1983-84, with enrollments by male students continuing on a steadily increased basis (Guppy, 1988,p. 14). A steady increase in mature student enrollments also contributed to the increased enrollment levels (Fortin, 1987; Pike, 1987). In 1984, mature student enrollments comprised thirty-four percent of community college enrollments, and twenty-two percent of university enrollments in Canada (Schutze, 1987, p. 10).

The lowest participation rates in universities are reflected in rural and Native Indian groups (Pike, 1987, p. 12; Council of Ministers of Education, Canada, 1987, p. 9). Rural inhabitants are most likely to enrol in the college sector.

Social and Political Factors

Prestige and Value of Degree Education

The increasing demand for degree programs can be partly attributed to the continuing societal perceptions of the social prestige and value of such education. An undergraduate degree is seen as "the ticket" to white collar jobs, and as such is a highly desirable commodity in Canadian society (Alberta Advanced Education, 1988, p. 12). "Young people increasingly exhibit a competitive, career-oriented approach to life that treats education as an essential tool for advancement, rather than as an inherently worthwhile activity" (p. 11). Adult learners typically demand some form of formal recognition (a certificate, diploma or degree) for programs completed in postsecondary education. Adult learners below the age of forty, and those with one to three years of postsecondary education are highly degree - oriented (Cross, 1979, p. 115). Within this degree-oriented group, the majority are interested in job-oriented and professional education. Interest in traditional liberal arts degree programs is not high (p. 117). Current undergraduate enrollment in universities reflects a trend towards career-oriented programs such as commerce and business administration (Statistics Canada, 1983, p. 12).

Demand for Local Opportunities for Degree Education

Stevens (1982, p. 424) claims that a new set of factors including inflation, job security pressure, and rising certificate and licensure requirements, are creating both an increased need and increased desire for baccalaureate education. Increasing pressure is being placed on higher educational institutions to meet the needs of those who cannot complete a baccalaureate degree because of inability to relocate. Foote (1983) also perceives a need to expand degree program availability beyond the existing university institutions. He claims that the demographic changes in the student population, resulting in large increases in adult, non-traditional students in the postsecondary sector, and the increasing demand for continuing higher education and retraining will increase the demand for local opportunities for complete degree programs. Kelly (1985) utilized demographic and employment measures and current enrollment trends in Illinois, to forecast adult participation in postsecondary education. He concluded that the majority of student enrollment in colleges and universities in the nineteen nineties will be adults in degree credit programs. Boone (1983) conducted an opinion survey of non-traditional students views concerning current and future course offerings in Tennessee postsecondary institutions, concluding that a large variety of degree programs offered in regional institutions would be required to meet these students' demands in the future.

Most Canadian postsecondary students attend institutions within their own province, and commonly within their own city (Pike, 1987, p. 7). The distance between home locale and the nearest postsecondary institution is a major factor in choice of institution and therefore program (Council of Ministers of Education, Canada, 1987, p. 9; Universities Council of British Columbia, 1977, p. 7). Postsecondary educational services are provided at the university and non-university level in major urban areas; in regions outside the major cities, the most common form of postsecondary education is at the non-university level, provided through a regional community college. Therefore, urban residents are more likely to enroll in university programs than are rural residents.

People located outside the major cities are increasingly insistent that the same breadth and quality of educational services be provided in these areas as are provided in the major urban areas. The rationale of high cost per student is no longer acceptable as a major reason for non-provision of service (Duhamel, 1987, p. 15). If the perceived need is for degree programs, strong views exist that such programs should be made available. Establishment of such programs in regional areas is believed to stimulate development of the region as well as increase the retention of young people in the community (Spaulding, 1988, p. 8). The Universities Council of British Columbia (1977) provides support for this view in the findings that the regions of B.C. "where problems of access to postsecondary education exist are precisely those characterized by stagnation of economic growth, decreased prosperity, and decreased productivity" (p. 5).

Differing Views of Institutional Prestige

Distinct differences exist in societal perspectives of the academic prestige of postsecondary institutions. Community colleges are generally accorded less prestige than the universities due to the prescribed mandate to broaden access to individuals who are unable to enroll in the universities due to academic, economic, social, occupational, or age restrictions; and the strong commitment to career orientation and occupational competence as the outcomes of the offered programs (Dennison, 1984, pp. 142-143; Konrad, 1981, pp. 49-51). However, community colleges are viewed by most governments as a political success. Democratization of postsecondary education has occurred through increasing opportunities for a broad socio-economic section of society, and interaction of students in differing types of postsecondary education in these colleges. These nonuniversity-level technical, occupational, and general education programs are often viewed as most directly meeting current societal needs (Gregor, 1979, p. 39). Regional communities are seen to gain substantial economic and "quality of life" benefits, due to the presence of a community college (Dennison, 1984, pp. 140- 144). Despite this governmental focus, the public views the services of the community college as existing to meet the needs of the community; and the needs of the community are only partially met by the provision of non-university level programs. Demand for degree granting capability and/or extension of local university programming to degree certification levels is consistently expressed in regions not presently served in this manner (Berghofer and Vladicka, 1980, p. 45).

Transfer and Part-Time Enrollment Capability

The demand for regional degree programs is heightened by the lack of transferability between colleges and universities in most provinces (Fortin, 1987), and the limitation in programs available to students who require part-time access to university studies. Part-time student enrollment in universities is primarily limited to general study programs. Programs in physical and natural sciences, commerce, pharmacy, nursing, education, and professional programs such as medicine, dentistry, and engineering are seldom offered on a part-time basis (Pike, 1987, p. 10). The growing numbers of adults seeking university education heightens the political aspect of such limitations. These students are expected to demand types of programs which specifically address their occupational needs, and effective methods of teaching and learning which meet their non-traditional time and access needs.

Brown (1986) found that adults over the age of twenty five who wish to pursue baccalaureate education are constrained by perceptions of age differentials, distance from residence to campus, and the need to maintain employment status and benefits. Adult undergraduate students "overwhelmingly" prefer part-time study close to their work or place of residence (ibid.). Factors such as goal orientation and learning orientation will determine the type of program (traditional or non-traditional) chosen by the adult student. Considerable political pressure for change in programs and formats can be exerted by this mature group, a factor not present in the traditional student group (Cameron and Ulrich, 1986, p. 6).

Institutional Responses to the Demand for Degree Programs

The universities have primarily responded to the changing demand and need for university programs by altering the format of traditional degree programs. The most common response of the universities is to offer individual courses in the evening, spring or summer sessions; and/or to offer partial or complete programs in an off-campus location. In these alternate program formats, little has changed from the traditional provision of degree programs and courses. Direct instruction is still provided by university professors; course requirements, number of credits required for awarding a degree, and residency requirements remain the same as in traditional degree programs (Apps, 1988, pp. 122-124). Utilization of distance education techniques is increasing in many of the universities providing off-campus degree education. A few universities in Canada offer completion of degree programs on a part-time basis. Simon Fraser University in British Columbia is the most active, offering a broad range of programs which can be completed on a part-time basis.

In some provinces, the government has attempted to meet the escalating demand by expanding the number of courses offered and enrollment numbers of university-transfer programs in the public colleges, while maintaining or expanding undergraduate enrollment quotas at the universities. To meet the needs of individuals in isolated regions, several provinces have established educational consortia. These consortia are "voluntary associations of postsecondary institutions and agencies which cooperate with each other and the local community to provide credit programs ... in areas not in close proximity to an existing postsecondary educational institution" (University of Alberta Senate, 1986, p. 20). The Inter-Universities North Consortia in Manitoba and the Open University Consortium in British Columbia provides degree credit courses to individuals in northern Manitoba and northern and interior British Columbia; five consortia in Alberta provide both degree credit courses and non-university courses through a combination of on-site and distance delivery instruction (pp. 10 -11).

Perspectives on Increasing Access

The Access and Quality Dichotomy

The present levels of accessibility, and demands for increased access to university studies, have raised concerns about the effects of increased student numbers on institutional ability to maintain high quality teaching, research and scholarship. To the advocates of traditional, elitist universities, a large number of students is equated with reduced quality, due to a belief that large numbers reflect an increase in the proportion of average and less motivated students (Farquhar, 1987).

> Universities can only play a rather small part in the larger entity which is higher education. The idea that you can have mass university education is completely mad. It seems common sense to suppose that we should only have university programs for very small proportions of the populace.

> Higher education could then focus on creating quality of life for all people at the appropriate level. (Halsey, 1987, p. 344)

The overriding belief of those who take the Halsey view is that access should be limited to those who have the ability to do the work, not based on democratic representation of social and economic groups in society. Limiting access by strict admission criteria, increased standards, and quotas is seen as necessary to maintain high quality in educational services, research, and service activities; to maximize usage of limited resources; and to maintain the distinctive values and standards of universities (Farquhar, 1987, p. 5; Silber, 1988, p. 439). The further development of the research and scholarship function of the universities, and the development of universities as world-renowned centers of excellence, is seen as dependent on limitation of access to undergraduate programs. Utilization of universities as "second chance" institutions is seen as inappropriate. A belief exists that open access discriminates against the first class students. Present access, or even slightly reduced access, is seen as sufficient to meet the needs of those individuals capable of benefit from such education (Godfrey, 1987, p. 49).

The Canadian Standing Senate Committee does not see a need to further extend accessibility to colleges and universities beyond the present rate:

> The committee concludes that accessibility to college and university in its aggregate form is not a problem of national dimension. With close to 55 percent of high school graduates going directly to higher education -- and with about 750,000 full-time students presently in our institutions, representing 23 percent of the 18-24 age group -- we believe that the federal government should not be disposed to advance policies or programs that are designed to encourage greater numbers of students to attend universities or colleges in Canada. (1987, p. 41)

However, Levin and Sullivan (1988) point out that one of the major problems with accessibility in Canada is the slowness of the postsecondary institutions in adjusting to changes in the demographics of both actual and potential students.

> Even now not all programs are available part-time, while off-campus programs are still relatively infrequent. The specific needs of minorities, adults in the labor force, women re-entering the workforce, and other groups have been dealt with primarily through "special" programs, while the mainstream instructional and on-going practices have hardly changed. (p. 4)

Increasing requirements in the job market for undergraduate degrees is seen as a negative outcome of the expansion of accessibility. Both Spaulding (1988, p. 11) and Fuller (1987, p. 23) believe that as more and more degree prepared individuals are available, employers will differentiate between applicants on the perceived quality (prestige) of the degree held. The perception of quality will be based on perceptions of institutional prestige.

Alberta Government Position on Accessibility to Postsecondary Education

As stated in the Alberta Advanced Education Newsletter of November 1988,

> The position of the Government of Alberta has been, and continues to be, that all qualified Albertans whose interests and abilities lead them to do so, should have the opportunity to further their education ....
>
> Opportunities exist in a wide spectrum of programs ranging from engineering to fine arts, from technical institutes to universities. It is possible in Alberta to obtain anything from a diploma to a PhD. Instruction can be obtained in the classroom or through distance education such as is offered through Athabasca University. The government ensures that the infrastructure exists in this province to assist all those students who have the desire and the will to increase their level of learning.

> Advanced Education and Alberta's institutions have a shared responsibility to continue to make sure that access to postsecondary education is possible. Education continues to be a top priority for the Government of Alberta. (p. 2)

Quality of Off-Campus and Transfer Programs

Concerns also exist regarding the continuing demand for provision of off-campus and distance education format degree programs, and with proposals for provision of degree education by institutions other than universities. "Perceptions exist that education obtained through these formats is of lesser quality than on-campus, instructor-based education" (University of Alberta Senate, 1986, p. 40). The major problems perceived are: "the lack of availability of adequate library collections, equipment and technology; ability to find staff willing to undertake such programs; and finding adequate numbers of students to justify the cost of offering these programs" (p. 25). These factors lead to concerns as to whether such programs can be justified in terms of cost, quality, and duplication of services, particularly in an environment of limited resources. Fears that traditional on-site programs may be (or are being) jeopardized exist. Professional and laboratory intensive faculties believe that because of the need for specialized facilities in their programs, off-campus provision of courses is not possible (p. 27).

Lee (1986) found that there were no significant differences in academic outcomes of programs offered on-campus or off campus, even though there were significant differences in the availability of library resources and instructional materials between the two types of programs. Off-campus program students had far greater difficulty in gaining access to library resources. However, the perception of the availability of academic counselling was much higher in off-campus than on-campus programs. Friedman (1985) compared natural science curricula in an external degree program and three conventional programs in Pennsylvania. No essential differences could be found in the content or laboratory experiences provided by the external degree and traditional degree programs, leading Friedman to conclude that external degree programs were a valid way to provide quality education.

STRUCTURES OF POSTSECONDARY EDUCATION IN OTHER COUNTRIES

United States of America

In the United States, postsecondary education is an individual state responsibility. State legislatures have assumed little or no regulatory responsibility for higher education, primarily due to the free market orientation of American society (Semrow, 1982, p. 384). State licensure and approval and federal funding of programs is dependent on accreditation of postsecondary institutions by accreditation agencies. These agencies are private, voluntary organizations officially recognized by the Federal Secretary of Education, which set standards and criteria for evaluation of postsecondary educational programs (Arnstein, 1982, p. 550; Stoughton, 1981, p. 37). If a postsecondary institution wishes to grant a baccalaureate degree, approval is sought from one of the accrediting agencies. Such approval normally results in a change of state licensure to allow the institution to grant a degree.

The system of postsecondary education in the United States is characterized by diversity and ease of access, reflecting the beliefs of this society in the benefits of pluralism and competition (Skolnick, 1987, p. 7). The status and prestige issues associated with degree granting in Canada are defused in the American system. Nearly all postsecondary educational institutions in the United States grant a degree, either a two year Associate Degree or a four year Baccalaureate Degree. Community and junior colleges, both private and public, grant Associate Degrees rather than diplomas on completion of two year general education or occupational programs. Several universities offer two year Associate

Degrees as well as the standard four year Baccalaureate Degree. Private and public colleges (designated as four year colleges) offer baccalaureate and graduate degrees, as do the universities. Therefore, the distinction between degree granting and non-degree granting institutions is blurred.

The Associate Degree was created for three purposes: to offer a terminal award for two years of postsecondary education which would have credibility with the American public; to inform the universities that these students were prepared in studies similar to the first two years of university level education; and to inform employers of graduates' competencies (Cohen & Brawer, 1987, p. 20). The Associate Degree does not appear to have eased transfer to university studies but does have high public acceptance. The Associate Degree is designated as the minimum entry requirement for many jobs (p. 22). Presently consideration is being given to establish a four year Associate Degree, to be differentiated from a baccalaureate degree through its emphasis on occupational studies (p. 23).

Australia

The higher education system in Australia is made up of three distinct sectors: universities, colleges of advanced education [CAE], and technical and further education institutes [TAFE] (Harman, 1987, p. 194).

The universities were primarily established under state legislation as in Canada. One university, Australian National University, has been established by the Federal Government. All universities are funded and coordinated by the Federal Government. Universities offer baccalaureate, master's, and doctoral degree programs, and hold the primary responsibility for research. The colleges of advanced education were formed in the nineteen-seventies by the merging of different, state-controlled, non-university institutions, including senior technical colleges and agricultural, paramedical and teachers' colleges (p.

195). These institutions place emphasis on undergraduate diploma and associate diploma courses but also offer bachelor and master's degree programs. No doctoral studies are authorized for provision by the CAEs. Almost seventy percent of students in the CAEs are now enrolled in degree programs. With the inclusion of post-graduate courses, research activities and projects are common in the CAEs. These institutions are funded by the federal government but coordinated by the state. The technical and further education colleges provide programs for skilled trades, apprenticeship programs, remedial and preparatory work, and adult, non-credit continuing education. Both funding and coordination are the responsibility of the state; the Federal government provides capital and special funding.

The further development of this overlapping system is being continued in Australia. In 1980, the Western Institute in Melbourne was created as a multi-campus, multi-level institution to provide both diploma and degree programs in basic trade, occupational and technical areas. In 1986, the Northern Territory Government passed legislation to create the University College of the Northern Territory. This college is an independent college formed by merging three territorial community colleges. The college will affiliate with the University of Queensland for a period of five years, at which time it will be converted to a fully fledged university (West, Mahon, & Zoelner, 1988, pp. 289-291).

In 1988, the Australian Federal Government released *Higher Education: A Policy Statement*. Based on an abridgement prepared by Ronanye, Acting Vice Chancellor of the University of New South Wales (1988), the intent of the policy is to consolidate the higher education system and redirect its activities to more effectively and efficiently meet national needs. Germane to this study is the statement that "the distinction made between the university and advanced education sectors will be removed" (Section 4.0, p. 2). Institutions will be encouraged to be flexible and responsive to national needs, in part through "productive competition between higher education institutions" (ibid.). Some merging of universities and CAEs may take place. A system of transfer credit between all institutional sectors will be established. Overall, the federal government of Australia appears to prefer amalgamated institutions offering both diploma and degree education, in order to provide more flexible, regionally responsive higher education (Harman, 1986, pp. 568-6572).

Britain

Since the nineteen sixties, the British system of postsecondary education has consisted of traditional, elite universities; polytechnics providing degree level technical and professional education; colleges of education; and the Open University providing degree level distance education. In nineteen-eighty, the government authorized the awarding of degrees by all institutions in teacher education programs.

The universities in Britain have little influence on determination of academic standards for degree certification outside of their own programs. The Council for National Academic Awards was established in 1964 to award degrees to students who complete courses approved by the board in non-university institutions of higher education in the United Kingdom. Such course validation occurs through a hierarchy of committees, detailed visits to colleges, and scrutiny of intensive documentation. The process is a continual one, and is viewed as setting more rigorous academic standards for these institutions than the universities set for themselves (Shattock, 1983, p. 116; Watson, 1986, p. 62).

The British government appears to prefer merger and upgrading of non-university institutions to university status, or for these institutions to incorporate degree granting programs, as the means to meet the demand for degrees.

West Germany

In the 1980s, the West German Government proposed and implemented a new form of higher education institution, titled the "Gesamthoschule" (Comprehensive University). This institution is defined as one which

> amalgamates in some form hitherto separate segments of German higher education: universities or technical universities; teacher training colleges; technical colleges; and colleges of fine arts; to provide diploma and degree education, and initiate applied research. (Cerych & Sabatier, 1986, p. 197)

The actual amalgamation can occur in two forms. The first is a cooperative format, where the institutions involved maintain their autonomy, but create mutual links and cooperative programming to ease student transfer. The second form, and the most common type of this new institution, is the integrated model where the various institutions are merged into one single institution (p. 199). Six such integrated institutions have been created. Some difficulties in staff integration have been encountered, resulting in conflict and tension between teachers from the technical colleges and those from the university. "The major resistance to cooperation comes generally from teachers with university status" (p. 208). A law passed in 1982, which allows promotion of teachers with technical college qualifications up to the level of full university professor in the Gesamthoschule (GHS), is believed to be reducing this conflict.

An additional problem has arisen regarding credibility of degrees awarded. The credibility of the technical diplomas is not an issue. The university level degrees awarded are "formally considered equivalent - within the civil service and private sector - to those awarded by traditional universities. But in practice their employment prospects are not as good - they may be likened to those of graduates from less prestigious universities " (p. 210). Exceptions to this view of the credibility of GHS degrees exist dependent on the reputation of particular departments, or on the location of the GHS in a particular region. Students enrolled in GHS institutions, however, show a marked preference for the degree programs over the diploma level programs.

The advantages seen to this form of higher education are that university level education has in fact been extended to a new group of students; these students have demonstrated their ability to successfully complete this level of education; and a distinct, applied emphasis exists in the degree courses offered (p. 211). The GHS institutions are seen as being preoccupied with a desire for academic and scientific recognition, and in this quest, are tending to add university to the original title. In addition, "an academic drift toward traditional standards and an emphasis on academic values in teaching and research has come about"(p. 212). None of the Gesamthoschules were created from traditional universities. These universities were unwilling to be associated with less prestigious institutions, particularly technical colleges. They expressed great apprehension about the effect of such mergers on the quality of education, and feared greater state control based on the established system of control for non-university institutions.

The formation of these new institutions must, however, be seen as a partial success as many of the European countries have adopted the policy of the German Federal Republic to restructure their postsecondary system to allow technological institutions, teacher-training colleges and other postsecondary institutions to become comprehensive universities. These new institutions provide a range of different diploma, certificate, and degree programs, and have authority to grant all levels of certification up to and including the baccalaureate degree (Altbach and Kelly, 1985, p. 32).

MODELS OF EXTENDING DEGREE GRANTING CAPABILITY

Models for extending degree granting capability adopted in countries other than Canada provide options for upgrading the status of institutions and for the formation of new institutions which offer both university degree and non-university, diploma-level programs and certification. Other models exist which maintain the control of universities in degree granting, but utilize the physical and human resources of non-university institutions to extend the availability of complete degree programs.

The following discussion describes and discusses the major approaches and models for extending degree programs.

The California Master Plan for Higher Education

The State of California adopted a framework for higher education in 1960, known as the *Masterplan for Higher Education,* which "was designed to meet the organizational and curricular needs of public higher education in the State for the next ten years and thereafter" (International Association of Universities, 1986, p. 192). This Masterplan has been evaluated and modified approximately every ten years to increase the ability of the system to meet current needs. The Masterplan is considered a success within the State and by observers in other countries, particularly as to the demonstrated outcomes of providing "equal access to high quality public higher education to California citizens" (p. 194).

This plan for the higher education system was developed to address several identified issues in California:

> a rapidly expanding population, and the resultant increased demand for enrollment in the Universities, State Colleges, Community Colleges, and private institutions; a need to have an effective and efficient system through which students could obtain higher education; a need to address access and standards of admission in terms of development and maintenance of high quality programs, and the need to have appropriate governmental oversight of the system. (p. 193)

The Masterplan specifies the roles and mandates of all public institutions. The University of California is a multi-campus university which holds primary responsibility for education at the doctoral level and for the professions (defined as Law, Medicine, Dentistry, and Veterinary Medicine); and responsibility for organized research. The State Colleges were converted to State Universities and given responsibility for baccalaureate and master's level education. State Universities can offer doctoral programs only under joint degree agreements with the University of California or the private universities. The Community Colleges were given responsibility for two years of university-transfer programming, with transfer for successful students guaranteed to either public or private universities; and were also given responsibility for vocational, occupational, and cultural training based on the needs of the local community.

> In effect, the University of California became more restrictive, admitting only the top eighth of the students leaving public secondary schools, while the State University system would accept those from the top third of this class, and the Community Colleges would welcome all with a High School diploma. Thus, access was assured and quality would be maintained and improved. (p. 193)

Sheehan (1977), in his study of financial planning for Alberta Colleges and Universities, utilized the California Masterplan to assess "ways Alberta might benefit from features of comprehensive planning" (p. 119). Sheehan believes there are many of the characteristics and techniques of the comprehensive planning process outlined in the California Masterplan, and in particular, the denotation of clear institutional mandates and roles for the institutions of higher education

> that could be applied to Alberta without eroding or enhancing existing institutional autonomy and the academic freedom of teachers and scholars. The freedom to act according to institutional goals and objectives is the

> essence of institutional autonomy and is not contrary to the notion of accountability. (p. 141)

Upgrade Non-University Institutions to University Status

This approach has been the most common method of increasing the availability of degree education in most countries. In Canada, such upgrading has occurred, for example, with the University Colleges and Ryerson Technical Institute in Ontario, Victoria College in British Columbia, Regina College in Saskatchewan, and with conversion of the Academic Section of the Lethbridge Community College to the University of Lethbridge in Alberta.

The major disadvantage seen to this approach is the loss of career and occupational program provision in the converted institutions. In many regional areas, separate institutions for degree studies and diploma level studies are not demographically or economically feasible.

Extension of Traditional University Programs

University Colleges

University Colleges in Canada, the United States, and Australia reflect the establishment of four year affiliated degree programs in a community or private college, with degree granting authority remaining with an affiliated university. Programs offered in such colleges may be exclusively at an undergraduate degree level, or may provide a combination of degree and diploma level courses.

Capstone Programs

As originally designed in the United States, Capstone programs involve the addition of two years of liberal arts studies to a completed technical or career-oriented program, resulting in a baccalaureate degree in arts or general studies (Prager, 1988, p. 81). The liberal arts studies are provided under the auspices of a university, often utilizing the resources (both physical and human) of the community college which offered the diploma program. Standards, program content, and program design, however, are the responsibility of the degree awarding university. Capstone programs have recently been extended to include degree programs in areas other than liberal arts; for example, administration and nursing. In these areas as well, Capstone programs are characterized by the addition of two years of primarily theoretical courses following completion of an associate degree or diploma program in a community college.

Two Plus Two Programs

At the university level, these programs are designed as four year articulated models of degree completion education, with a diploma or associate degree certification exit point at the end of the first two years. Most commonly occurring in specialized fields, two plus two programs differ from Capstone programs in the integrated program design of both liberal arts and disciplinary knowledge and skills, and the fixed curriculum sequence throughout the initial years of "diploma" education and the senior years of the program leading to the degree (Prager, 1988, p. 81). Generally, specific courses in the first two years of the program remain under the control of the college.

Cooperative or Brokered Programs

Such programs involve university utilization of the facilities of a community college to offer a residency program leading to a baccalaureate degree (Stevens, 1982, p. 424). In essence, the university maintains full control of the program content, design, standards, and instruction throughout the entire program. The definition of cooperative programming can be expanded to include use of college personnel in various courses leading to the degree; and recently has been expanded to include some college input into program design.

Stevens discusses a particular example of such programs in regional community colleges. His major premise is that external degrees offered according to this model will maintain the quality of degree programming. He views this type of programming as particularly adaptable to urban community colleges with close physical proximity to a university, but also views this type of programming as basic to workable consortia arrangements with rural community colleges. His model incorporates needs assessment, assessment of outcomes, identification of the advantages and disadvantages to the involved institutions, and negotiation of agreements on control of the program.

Generally, if a university initiates extension of degree programming according to this model, the resultant program will be defined as an extended campus program. A modification of the extended campus program model is for the university to provide the senior years of a degree program, similar in design to a two plus two program. If the university offers only the senior years of a degree program, providing blanket credit for two years of work completed at the college, the term applied is **"outreach."** If a college approaches a university to provide such programming, either as a complete program, or as a senior undergraduate transfer program, the term applied most commonly is a **"brokered"** program (Prager, 1988, pp. 80-82; Stevens, 1982, pp. 423-424).

Consortia

As described in an earlier section, consortia are arrangements through which two or more institutions cooperate to provide expanded programs. The benefits of such a system are seen as: reducing duplication and increasing efficiency by pooling resources; strengthening of the quality of programs and services through the sharing of resources; increasing access to higher education for a variety of students, particularly those who are geographically isolated or place-bound; contributing to the financial advancement of member institutions due to the power of collective requests for additional funding; and enhancing effective communication between post-secondary institutions. The problems seen with consortia are: the potential for lack of trust and conflict between consortium members based on maintenance of institutional autonomy; potential for unequal commitment of member institutions; mismatching of institutions in terms of philosophy, interests, and history of institutional rivalry; and problems created in institutional management (Konrad and Small, 1986, pp 80 - 83).

Communiversites

In the United States, Gleazer (1980, p. 10) has proposed development of "Communiversities" which will link together universities, colleges, schools, and community organizations to provide a wide variety of postsecondary educational programs. Moratorana and Kuhns (1988, pp. 238-239) visualize the community college as the center of this collective. The principles, proposed advantages, and disadvantages of communiversities are those of consortia, with the major advantages seen as meeting local area and regional needs in a decentralized, cost-effective way.

Create Multi-Program Institutions

Creation of institutions offering both degree and diploma education is a developing trend in West Germany and Europe, Britain, and Australia. Creating multipurpose institutions is not a new idea in Canada either. In 1971, the Committee of Presidents of Universities of Ontario presented a report to the Commission on Post-Secondary Education in Ontario, entitled *Towards 2000*. This report recommended that the Colleges of Applied Arts and Technology (CAATS) be authorized to grant degrees in specified undergraduate programs, dependent on local demand for such education, and providing degree education demands were not being met by other means. CAATS would continue to offer their diploma and technical certificate programs.

> Every region of the province would have centres where degree work in generalist arts and science courses and appropriate first professional degree courses were available. We think that the existing Colleges of Applied Arts and Technology would form the logical base for such centres in most regions. Technical, technological and extension courses would continue to be given .... They would do no graduate work and their staffs would not be research-oriented personnel. Degree granting status would be monitored so that there would be no danger of "degree mills" being created. (Subcommittee on Research and Planning, 1971, p. 69)

Although the committee believed universities should continue to offer all undergraduate programs, the stated long range intent was to gradually shift university emphasis to advanced, specialized, and professional work requiring involvement with research (pp. 69-70). The Committee outlined CAAT degree programs as follows:

> 1. The emphasis in offered professional programs should be on practical experience and the development of technical skills, not on applying research skills to enhance understanding of professional knowledge and practice.
> 2. The emphasis in all degree programs offered should be on "transmission of knowledge" through teaching, whereas universities emphasize "advancement of knowledge" through involvement in research activities and applications. (pp. 83-87)

A need was seen to develop some "control" system for the recommended expansion of degree granting capability. Simply conferring degree granting status on CAATs was seen as unrealistic, due to the varying qualifications, experience and educational philosophies of the CAAT staffs, and the variations in the level of program development in each CAAT. Conferring blanket approval for degree granting on all CAATs would create inordinate pressure for these institutions to develop such programs; and could easily result in lowering of academic standards in the degree programs offered (p. 74). A second alternative was to have CAAT staff teach degree level courses in affiliation with existing universities, that is, creating external degree programs. Concerns with this alternative were anticipated, e.g., the pressure on existing universities' capacity for involvement with programs other than those which are central to their specific mandate, thus detracting from their research and graduate program responsibilities.

The third alternative, and the one supported by the Committee, was to place the degree programs in CAATs under the control of an overall body (p. 75). The report recommends this body be a new university, the University of Ontario, with its governing board composed of both university and college personnel. The University of Ontario would be authorized to grant generalist degrees based on degree programs offered in the CAATs. An alternative to the University of Ontario concept identified but not discussed in the Committee report would be to create a Government of Ontario Department of Post-Secondary Affairs, with a single advisory body responsible for approval of and monitoring of undergraduate degree programs (p. 170).

In addition to ensuring that CAAT degree programs met expected standards, the report also recommended that the University of Ontario, or one of the existing universities, could develop degree program packages, including instruction and evaluation material, based on existing standards and content in undergraduate degree programs. Involvement of cross-disciplinary teams, including highly qualified academics, media experts, and curriculum consultants, and incorporation of educational technology in development of these packages would be the mandate of the institution (p. 30). These packages would form the basis of degree courses offered by CAAT instructors. In this way, the committee believed access could be widened and quality of degree programs maintained, in an economically feasible way (p. 79). An additional advantage seen was that other universities in the province would have no basis on which to refuse admission to further university studies, to students holding this pre-approved degree.

Although these report recommendations were not implemented during the nineteen-seventies by the Ontario government, the report is frequently mentioned in current Ontario discussion papers and journal articles concerned with increasing access to degree programs and revitalizing the universities in Ontario.

Perspectives on Extending Degree Completion Programs

Institutional Roles and Mandates

Determination of the appropriate roles and, consequently, the program offerings which will best serve the needs of a changing society is a primary concern of post-secondary institutions. Institutional response to date has been to increase the comprehensive nature of program offerings to meet this demand. Governmental pressure, however, is for institutional specialization. Current theorists (e.g. Cameron & Ulrich, 1986; Cope, 1985; Hardy, 1987; Morrison, 1987) support the position of institutional specialization. Zammuto (1986, p. 72) claims that institutions must establish their particular competencies in programs and services, and extend these specific competencies in order to more effectively meet community educational needs. However, strong support for basing institutional mandate on responsiveness to constituents and clients is also evident in the higher education literature. Young (1981), Peterson (1980) and Birnbaum (1984) claim the only realistic institutional goals and missions are those which the community is willing to support. Therefore, assessment of the perceived issues, aspirations and perceptions of the relevant public constituencies is essential in determining institutional mandates and roles.

Effects of Extending Degree Programs Beyond the Universities

Arlton and Kalikow (1986) state that even though there has been considerable expansion of access to degree programs through external degree programming, it is not perceived by the public as meeting their needs. These authors reviewed accreditation reports and evaluations of fourteen free-standing specialized organizations which grant diplomas, baccalaureate and master's degrees through non-traditional instructional formats in the humanities, medicine, biomedical science, nursing, business, electronics, engineering and management. They predict an increase in this type of education because of the lower or comparable costs of such programming; the specific career orientation and "state of the art" exposure inherent in the programs; the high academic quality of the programs; and the responsiveness of these programs to societal needs and curricular demands. The authors conclude that higher education institutions should develop their programs and certification mechanisms to reflect these new institutional formats and services (pp. 381- 385).

Establishment of alternate educational institutions in various regions of a country is often seen as a mechanism to stimulate development of the region as well as increase accessibility to the people in the region. These effects occur when the credibility of the education provided is established, and job opportunities are available in the region. The danger seen in providing regional education is that institutions may tend to focus on preparing graduates to meet the work requirements of the region, rather than providing an overall high quality education. A secondary effect may be the reinforcement of perceptions of the more prestigious institutions being urban (Spaulding, 1988, p. 8). In Canada, distinctions in academic prestige of institutions already exist, with community colleges in general being perceived as less prestigious than the universities; and the long-established central and eastern Canadian universities perceived as being more elite than other universities (Pike, 1987, p.4)

Cohen and Lombardi (1986, p. 24) state the success of community colleges is based on two factors: their adaptability to community needs and the quality of teaching due to the student-oriented faculty and smaller classes. Colleges providing university programming presently are seen to provide higher quality education, at lower cost due to lower tuition fees and the economic advantage of living at home (Elliott, March 20, 1988). However, the effect that increasing the number of years of university-level education provided by community colleges might have on decreasing the provision of non-university programs is of great concern to many postsecondary educators (ibid.).

The ability of community colleges or other non-university institutions to provide the "quality" of education required for degree programs is another area of controversy. The major issues center on the differing admission requirements, particularly the open access fostered in community colleges, the focus on skills and knowledge required for particular occupations, and the lack of required liberal arts courses in many of the community college programs (Cohen & Brawer, 1987, pp. 96-101). Most studies indicate that students who have received their initial education at a community college show little difference in academic performance in subsequent baccalaureate degree programs from those students who initially enrolled in baccalaureate programs (p. 101). In a study to assess the educational outcomes for students who complete university-level coursework in a community college and subsequently transfer to a baccalaureate program, Nunley (1986) found a strong relationship between community college attendance and completion of the baccalaureate degree. Through document analysis of admission records and transcripts, Nunley established that these students had little or no difficulties in meeting the standards and criteria established by the baccalaureate program. The findings of this study confirm those of Richardson and Doucette (1982) who examined the performance, persistence and degree achievement of students transferring from Arizona community colleges to the three public universities in that state.

Gregor (1979) summarizes the disadvantages of extending degree granting status to non-university institutions as follows:

1. it would extend the notion of "prestigious" vs "non-prestigious" education,
2. it would enhance professional and occupation groups existing biases in favor of baccalaureate degrees as basic "entry to practice" requirements, and remove the need for these groups to establish justification for this requirement,
3. it may create an artificial need for university training for purposes of esteem and status, where the actual demands of the job do not require it,
4. the differences in admission requirements in the various sectors would result in an overall lowering of standards, and
5. university programming would become subject to government control and direction, leading to loss of academic freedom, autonomy, and development. (pp. 40-41)

The advantages of extending degree program capability to community colleges is summarized by the Committee of Presidents of the Universities of Ontario (1971) as being an effective way to permit and encourage diversity among universities and CAATs; provide an economical way to meet regional needs; and encourage some universities to become centers of excellence (p. 71).

A Model for Determining Design of Extended Degree Programs

Medsker and Edelstein have studied the question of extending opportunities to obtain baccalaureate degrees since the early nineteen-seventies. To determine the need and potential format of extension of current programs to a degree level, the following guidelines were developed (1977, pp. 18-72):

1. Consideration of factors concerning the clientele to be served by the degree.

This category includes identification of specific and general degree interests of potential students, and identification of degree needs -- both current and long term -- due to the particular regional environment. (That is, what businesses, industries, services, professions dictate degree level programming?).

2. Assessing regional interest and planning.

Although Medsker and Edelstein suggest marketing surveys should be done at some point, their belief is that community groups and agencies are best able to identify potential clientele, how to serve them, and the resources available to support programs.

3. Determination of kinds of programs

This category includes interpretation and synthesis of the data elicited under (1) and (2), to identify potential types of programs; the physical facilities and human resources needed and possible sources; and identification of the availability of learning resources to offer programs. As well, the authors suggest that possibilities of duplication with other institutions should be examined carefully.

Other considerations in this category include determination of student services needed, potential methods of organizing the degree program, determination of program standards to enhance the credibility of the degree, and determination of options within each institution for extension of degree granting programs.

4. Assessment of external attitudes and policies toward extended degree status.

The prime targets for the assessment are the government agency responsible for higher education, and the professional accrediting bodies.

CHAPTER SUMMARY

The opening section of Chapter 2 defines policy analysis, describes the design of effective policy research, particularly related to prospective policy analysis design, and the application of these concepts within this study. The need to incorporate an assessment of the external socio-economic environment, the political environment, and the structure of the higher education system and policy making systems is identified and discussed. The key role of interest groups in influencing policy formation, and the role of key stakeholders within those interest groups is discussed. Models to incorporate assessment of these interest group roles and positions in prospective policy analysis are then described.

The discussion of the policy environment surrounding undergraduate degree granting capability and potential extension of this capability begins with a description of the present structure for provision of university education in Canada. Although degree granting has been historically the prerogative of universities, alternate degree granting structures and approaches to obtain degrees outside the universities have always existed. Approval of private colleges to grant degrees, the expansion of American degree program provision in Canada, and an increasing demand for regional provision of degree programs have resulted in several provincial governments re-examining the restriction of degree granting authority to universities.

There is both a demand for greater access to degree programs and a need in Canada for more baccalaureate prepared individuals. The major factor affecting the need for such individuals is the transformation from an industrially-based economy to a knowledge-based economy, and the corresponding change in job requirements. Factors such as maintaining employment and career development also increase the demand for higher education. The current and projected participation and enrollment rates in universities far exceeds the capability of the existing universities to provide high quality undergraduate education, if they are also to provide high quality graduate education and research. The inability of the universities to accommodate the demand is further affected by restrictions in funding; this factor particularly inhibits the ability of traditional universities to provide programs on an off-campus basis.

Equality of opportunity, regional development, inadequate transfer provisions between postsecondary programs, the increasing participation of adults in postsecondary education, social values, and perceptions of academic prestige of institutions and programs are major factors escalating the demand for increased provision of degree programs. The relationship between accessibility and program quality is a point of controversy, as is the quality of university-level instruction provided outside of the traditional universities. The actual need to increase the numbers of individuals prepared at the baccalaureate level, versus more extensive career preparation at the non-degree level, is an unresolved issue.

Other western countries have diversified their degree granting structures to include institutions other than universities. The United States is notable for its extremely diverse system which offers many routes to a baccalaureate degree. This system, however, is perceived by many Canadians as resulting in many instances of low quality degrees. In Australia, multi-purpose institutions providing degree and diploma education have been successfully established for approximately twenty years. Development of new institutions on this model is a focus of current Australian government policy. These multipurpose institutions are seen to provide the most flexible and responsive programs to meet the economic and social needs of the country. In Britain, a variety of postsecondary institutions exists. The universities offer degree programs only; other postsecondary institutions offer degree and diploma programs; still others offer only non-degree programs. A major change in degree granting authority has occurred with the creation of the Council for National Academic Awards, which approves courses and grants degrees to students completing these approved courses in any non-university institution in the United Kingdom. West Germany and other Western European countries have recently instituted amalgamations of non-university institutions to form Comprehensive Universities. These institutions provide programs with an applied knowledge focus, and which terminate in either diplomas or baccalaureate degrees. Although some problems have arisen with public perceptions of the credibility of degrees offered by the comprehensive university, and with tendencies of the comprehensive universities to increase the theoretical research activities within the institution, the governments of these countries consider these institutions the most appropriate model for further development of their postsecondary educational systems.

Models for extending degree granting capability include restructuring the entire higher education system, as represented by the California Master Plan for Higher Education; upgrading non-university institutions to university status; extending traditional university programs through creation of university colleges, capstone programs, two plus two programs, cooperative and brokered programs, or consortia; or through creating multi-program institutions. The need to develop some form of accrediting body, either within the university offering the degree or through creation of an independent or governmental approval body is a common theme in discussions of any of the models.

The chapter concludes with a discussion of the varying perspectives which exist concerning extension of baccalaureate degree programs. The major questions discussed are: Should postsecondary institutions be comprehensive or specialized in their program provisions? Can community colleges or other non-university institutions provide high quality, credible degree education? What are the possible outcomes of extending degree program provision? How can the need for external degree programs, and the most appropriate format for such programs, be determined?

Extension of opportunity to obtain a university degree is occurring world wide, and is a current issue in several Canadian provinces. Alberta is identified by several authors (e.g. Berghofer & Vladicka, 1980; Dennison, 1986; Gregor, 1979; Skolnick, 1987) as being somewhat unique in its interest in, and responses to, public demand for university programming. The specific factors which contribute to this unique Alberta perspective, and the implications for policy development concerning extension of degree granting capability within the province, are discussed in Chapter 4.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

Chapter 3 provides a detailed description of the theoretical framework, research design, data collection and data analysis procedures utilized, and a description of the process of conducting the research. Decisions made in the data collection and analysis process are identified, and the rationale underlying each decision is described. Concerns with validity, reliability and generalizability of the findings are discussed, along with a description of the specific measures taken to address these concerns. The ethical considerations implicit in the study, and strategies adopted to address these considerations are addressed.

CONCEPTUAL FRAMEWORK

The conceptual framework of this study embodies the concepts of prospective policy analysis. The specific model developed as the framework is an application of Mitchell's (1981) Legislative Decision Model of Policy Formation and Dunn's (1981) Model of Policy Formation to the issue of extension of degree granting authority to the Alberta public colleges, and identification of policy alternatives for resolution of this issue. Figure 3 is a diagrammatic representation of the conceptual model.

The *issue articulation phase* applies Mitchell's concept of environmental assessment, identification of legitimate interest groups, and articulation of the interests and expectations of the key stakeholders within those interest groups to the problem structuring phase identified by Dunn. The outcome is *issue identification* which incorporates Dunn's concept of problem specification. The *issue aggregation and analysis phase* includes Mitchell's concept of interest aggregation, and Dunn's concept of forecasting policy alternatives. The *development of feasible policy alternatives*, and the *determination of* *appropriate policy formation* based on analysis of key stakeholder positions on potential policy solutions is specified in both the Dunn and Mitchell models. Mitchell's designation of the need to identify the acceptability of each solution to the stakeholder groups, estimate which policy is likely to be most supported by these groups, and consider the impact of each policy solution on resource allocations and government goals are included in the design of this phase. Dunn's specifications that the consequences of policy implementation and responses of stakeholders to such policy implementation must be analyzed are also incorporated in this phase. The application of the two models in this manner results in a more comprehensive conceptual framework for prospective policy analysis.

STUDY DESIGN

This study was designed as a qualitative case study of the issue of extension of degree granting capability. An issue case study "deals primarily with the formulation of a problem and possible solutions, and only rarely reaches definitive conclusions" (Dunn, 1981, p. 362). Such case studies form the first phase of an in-depth policy analysis. Analysis of a policy issue includes description of the background of the problem, the perceptions of the significance of the issue in a policy context, description and definition of the issue, analysis of the issue, and development and analysis of possible solutions (p. 363).

A qualitative case study design is utilized by researchers in order to have an in-depth understanding of the situation and its meaning for those involved. The essential properties of a case study are these: *Particularistic*, in focusing on a specific situation, event, or phenomenon; *Descriptive*, in producing an end product which is a rich, "thick" description of the phenom[illegible] *Heuristic* , in its illumination of the reader's understanding of the phenomenon; and *Inductive*, in its reliance on inductive reasoning from data to form generalizations, concepts, or hypotheses (Merriam, 1988, pp. 11-13).

MODEL OF POLICY FORMATION

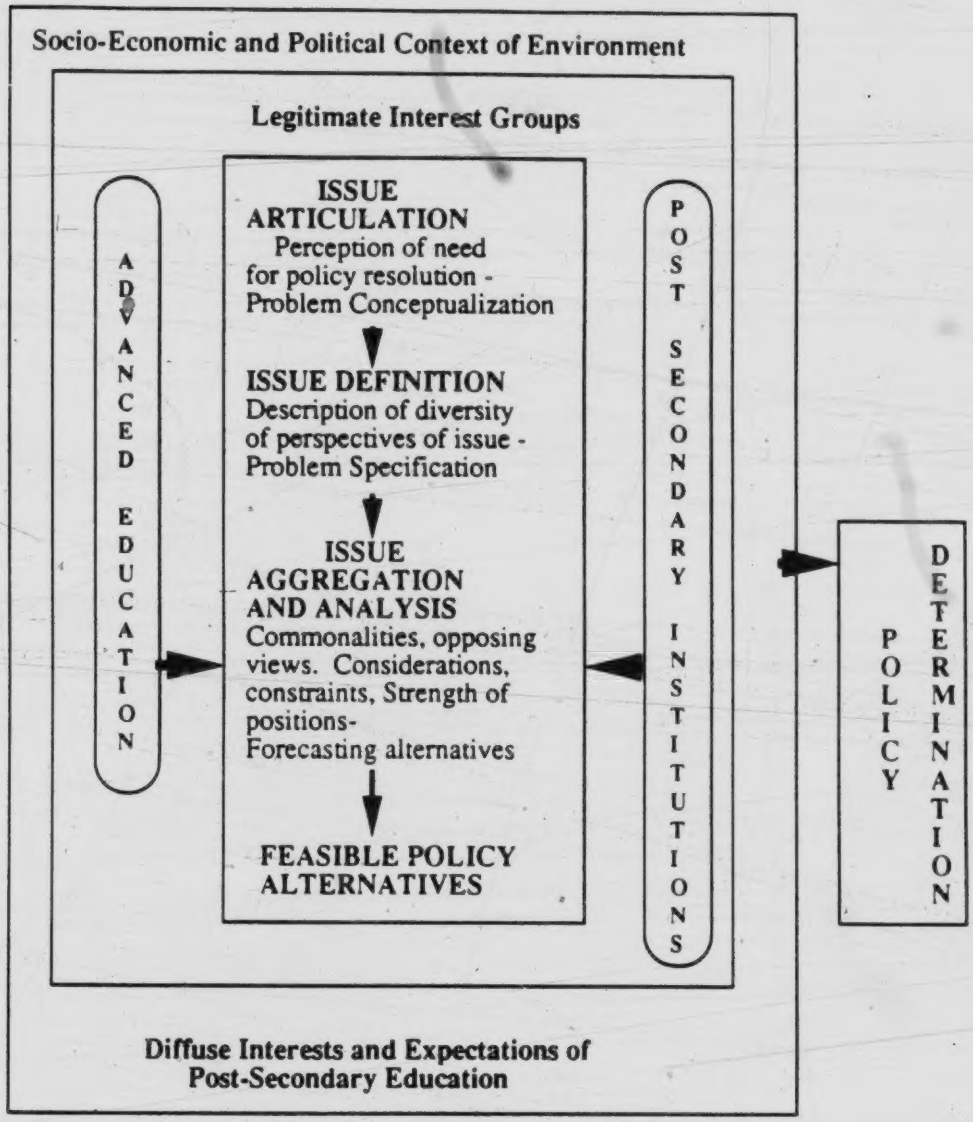

Socio-Economic and Political Context of Environment
Legitimate Interest Groups
ADVANCED EDUCATION
ISSUE ARTICULATION
Perception of need for policy resolution - Problem Conceptualization
ISSUE DEFINITION
Description of diversity of perspectives of issue - Problem Specification
ISSUE AGGREGATION AND ANALYSIS
Commonalities, opposing views. Considerations, constraints, Strength of positions- Forecasting alternatives
FEASIBLE POLICY ALTERNATIVES
POST SECONDARY INSTITUTIONS
POLICY DETERMINATION
Diffuse Interests and Expectations of Post-Secondary Education

Figure 3

Collins and Noblit (1978) identify the strengths of case study research (called field studies by these authors) in policy analysis as follows:

> [it] better captures situations and settings which are amenable to policy and program intervention. Second, field studies reveal not static attributes but understanding of humans as they engage in action and interaction within the contexts of situations and settings. Thus inferences concerning human behavior are less abstract than in many quantitative studies, and one can better understand how an intervention may affect behavior in a situation. Field studies are better able to assess social change than more positivistic designs, and change is often what policy is addressing. (as cited in Merriam, 1988, p. 33)

The limitations of qualitative case studies are described by Merriam in this way: the time and money expenditure required to produce rich, "thick" description may be beyond the resources of a single researcher; the product may be so lengthy and detailed that decision makers will not read it; case studies may overly simplify or exaggerate a situation; and may be interpreted as representing a whole picture rather than a segment (pp. 33-34). Careful design of the study, and specific selection of respondents assists in control of these limitations. In addition, the quality of case studies is affected by the "sensitivity and integrity of the researcher" (p. 33), and is clearly reliant on the maintenance of ethical sensitivity to control bias in selecting data. A final limitation is related to the political nature of case studies.

> At all levels of the system, what people *think* they are doing, what they *say* they are doing, what they *appear* to others to be doing, and what in fact they *are* doing, may be sources of considerable discrepancy. (MacDonald & Walker, 1977, as cited in Merriam, p. 34)

DATA COLLECTION METHODOLOGY

Data were gathered by document analysis and semi-structured interviews. The investigation focused on obtaining factual information, opinions, and perceptions of key informants in selected public colleges and all four universities in Alberta, and in the Alberta Department of Advanced Education.

Interviews

Semi-structured interviews were conducted with all respondents. The direct human interaction inherent in the interview process creates flexibility and adaptability in ensuring clarity, and allowing collection of a greater depth of data (Smith & Glass, 1987, p. 248). A more accurate picture of opinions and feelings is obtained through the collection of substantially more data than is possible through questionnaires. Borg and Gall recommend the use of the semi-structured interview for educational studies, claiming "it provides a desirable combination of objectivity and depth and often permits gathering valuable data that could not be successfully obtained by another approach" (1983, p. 442). According to Weiss (1975, as cited in Borg & Gall, 1983, pp. 438-439) three sources of error affect the validity of data collected through interviews. The attitude of the respondent to the interview or interviewer (*predisposition of the respondent*) will directly affect the quality of the response. Weiss suggests that careful attention to the design of the study and the format of the interview will eliminate or minimize the effect of respondent predisposition. Similarly, the predisposition of the interviewer, involving confidence, ability to establish rapport, and recognition of stereotyped expectations of people and their responses can bias data collection. The procedures used in conducting the interview, including explanation of the study, techniques utilized to gain respondent cooperation, and the conduct of the interview itself affect validity of data collection. Interviewing is not an appropriate method to collect quantitative data that can be measured more accurately by other methods, as inaccuracy of responses is highly likely (pp. 436-437).

Document Analysis

Relevant literature and institutional and government documents were subjected to the process of document analysis. This process is utilized to produce both quantitative and descriptive information, and to cross-validate research findings, thereby increasing the level of confidence in the validity of the data (Borg & Gall, 1983, p. 511). Mirvis (1980, pp. 419-422) argues that records and written material that are in the possession of an organization provide one of the richest unobtrusive sources of data. In addition to validating and supplementing data obtained through questionnaire or interview, document analysis assists in interpreting the significance of the data so obtained (Mouly, 1978, p. 171). Cautions associated with document analysis include concerns with validity, reliability, and generalizability of data so collected. Validity and reliability are related to the accessibility of information, the representativeness of the information collected, and inherent biases in recording. Generalizability is dependent on the context in which these data were generated, and determination of whether this content is unique or applicable to other settings (Mirvis, 1980, pp. 432-438).

THE DATA COLLECTION PROCESS

Data were collected through literature and document analysis, and through interview of selected respondents in three distinct phases.

Selection of Respondents

The individuals identified as the preferred respondents in the selected institutions were chosen by purposive sampling, that is, the individuals chosen are those whom the researcher believes have the most knowledge and understanding of the phenomenon

(Merriam, 1988, p. 47). Initially, the Presidents of each institution and the Chairman of the Board for each institution were identified as likely being the most knowledgeable, and also as most likely to reflect the institutional thinking.

Some difficulties were encountered in gaining access to the individuals within the selected institutions. Mount Royal College declined to participate in the study. This potentially increased the limitations of the study through lack of inclusion of a college representative in the second largest urban area in Alberta. The Chairmen of the Board of three of the five remaining colleges selected either did not reply to the request for interview, or indicated that they did not wish to participate in the interview process, stating that they believed the President of the institution could reflect the institutional position. This rationale was supported by two of the affected college Presidents. One of the three Chairmen who initially declined eventually agreed to be interviewed, following the direct intervention of the college President. This interview was difficult to conduct given the continuing unwillingness of the individual to participate; very limited information was provided; and the individual refused to authorize the use of the information obtained if the opinion or perspective was attributed to his position. Authorization of use of the information to clarify data provided by the President of the institution was obtained. In reviewing the information collected at those colleges where both the President and Chairman of the Board were interviewed, the major advantage of these dual interviews was the increase in confidence felt by the researcher as to the validity of the data collected. Although some minor differences in perspective were exhibited in the two interviews, in fact very similar perspectives on the issue of extending degree granting capability were expressed by both respondents. The researcher decided not to continue to pursue interviews with Chairmen of the Board who refused directly or indirectly through non-response to requests for interview to participate in the study, based on a belief that insistence on an interview would have very limited, if any, benefits. The researcher also decided to ask the opinion of the President of each university (in the second phase of data collection) if an interview with the Chairman of the Board would clarify the institutional position. None of the Presidents believed such interviews were necessary as all Presidents of the universities are also members of the governing boards, as are the College presidents.

The second major difficulty encountered in selecting respondents was to determine "who speaks for the university?" This problem has been mentioned in nearly every research study reviewed which involved university respondents. Given that the university presidents must speak for the university as a whole, particularly in the political arena, a decision was made to consider these individuals as valid respondents for this study. Each president was asked to indicate additional individuals who, in his opinion, should be interviewed to provide a more complete description of the institutional perspective on extension of degree granting capability. Two of the presidents did indicate additional individuals; one such individual in one institution was interviewed; the other individual in that institution, and the three individuals in the second institution did not respond to requests for interview, or it was not possible to arrange an interview within a reasonable time frame.

The third difficulty encountered was to determine who to interview within the Department of Advanced Education, particularly given the fact that the Minister responsible for the Department changed at the midpoint of the study. A decision was made to approach the Deputy Minister of the Department initially, and seek her opinion on additional interviews within the department and whether an interview of the Minister would contribute to the study. A interview with the Deputy Minister and the Assistant Deputy Minister, Policy and Planning, was conducted. These individuals stated that the Minister was aware of the study, and their participation in it, and had indicated that he saw no need for his participation and, in fact, felt he would have little to contribute to the discussion at this point. Thus, a decision was made to not request an interview with him.

Selection of Institutions

Determining which institutions should form the sample for the study created continuing difficulties for the researcher throughout the study. There was a necessity to limit the study to ensure its completion within the time and resources available, but also a need to ensure that the study resulted in a full description and analysis of the issue of extending degree granting capability in the province. A province-wide perspective seemed essential, as this issue has historically been an issue in selected public colleges through the province. Incorporation of all regional perspectives seemed imperative to fully assess the issue and develop feasible resolution strategies. An assumption was made that a decision to extend degree granting capability by the Alberta Government would apply to all similar institutions within the province and not to a particular institution.

Phase 1

Criterion-based sampling with openness to sequential sampling dependent on the data collected in the initial round of interviews was utilized as the process to determine the key institutions. Based on a document analysis, the researcher decided to restrict the selection of the public colleges to those institutions currently involved in offering two complete years of university-transfer programming in a wide variety of disciplines. These colleges were identified as more likely to be interested in and as having the human and physical resource capability to provide full undergraduate degree programming, than those public colleges which do not presently have university-transfer programming as a major part of their course offerings. An assumption was made that if degree granting capability were extended to the identified public colleges, a process by which the other public colleges could obtain degree granting capability would be established.

A decision was also made to exclude the Technical Institutes from the study. The literature review indicated that the interests and concerns of the public colleges and universities were in extension of degree granting capability in general arts, sciences and professional preparation programs, and that if the technical institutes were interested in obtaining degree granting capability, their interest would be in specialized applied technology areas, rather than in general undergraduate degrees. Conversion to a polytechnic type of degree granting institution similar to Ryerson Institute of Technology in Ontario would be the most likely goal. As the process of converting Ryerson Technical Institute to a polytechnic degree granting institution is well documented, it was assumed that a similar process would occur in Alberta if conversion of the technical institutes to specialized degree granting institutions became a desirable policy option. Therefore, the underlying rationale for, and the development of a policy to allow these institutes to grant specialized degrees, would likely not reflect the perspectives of public colleges, the major interests or concerns of the universities, or provide additional information on ways to resolve extension of undergraduate degree granting capability on a general discipline basis.

The following institutions were therefore selected as the representative sample of the public non-university institutions in the province: Grande Prairie Regional College; Grant MacEwan Community College; Keyano College; Medicine Hat College; Mount Royal College; and Red Deer College. As mentioned previously, Mount Royal College declined to participate in the study.

Phase 2

At the end of the first round of interviews, it became apparent that it was essential to involve all the universities in the province in the second phase of data collection. These data revealed that the perceptions of the need for extension of degree granting capability in the province were heavily influenced by particular regional perspectives and concerns, and were in part related to the particular university(ies) providing undergraduate degree programs in the region. Interviews were subsequently conducted at Athabasca University, the University of Alberta, the University of Calgary, and the University of Lethbridge.

Phase 3

On completion of the interviews with the university respondents, it was evident that the Department of Advanced Education was the key stakeholder in clarifying and possibly resolving the issue of extending degree granting capability. The Department holds the responsibility for determination of policy, controls the policy process through both legislated power and financial control of the postsecondary system, and is the initiator of the current policy revision focus within the postsecondary educational system. As such, the feasibility of suggested policy alternatives is very dependent on the viewpoints and responses of this department.

Following the interviews with the respondents of the Department of Advanced Education, the need to interview representatives from other postsecondary institutions in the province, and the need to request second interviews with previous institutional respondents was examined. The private colleges were seen by all institutional representatives as playing a somewhat minor role in the provision of degree education in the province, although they were seen to be a distinct part of the system for provision of degree education by the representatives of the Department of Advanced Education. The authority to offer degrees, and a process for obtaining and extending such authority, has already been approved in Alberta through the Private Colleges Act. Documentary evidence of the interests of the private colleges in further extending their degree granting capability, and their concern with extension of degree granting capability to specific public colleges was located. The responses of other individuals interviewed in the study, in particular the respondents for the Department of Advanced Education, provided additional information on the goals and concerns of the Private Colleges. Therefore, a decision was made that interviews of respondents in the Private Colleges would not contribute significantly to either the description of the issue, or the development of feasible solutions; in fact, such interviews might result in extending the issue to the point of confusion.

The interview transcripts, and the document analysis provide, in the opinion of the researcher, both a "rich and thick" description of the issue of extending degree granting capability in the province, and include sufficient information on the positions and perspectives of the private colleges, other public colleges, and other postsecondary institutions in the province to address the issue and develop feasible policy alternatives. All transcripts were returned to interview respondents, edited and approved by these individuals, and returned to the researcher with additional information or comments where applicable. On this basis, the researcher decided that the interviews conducted with respondents of the identified public colleges, the universities, and the Department of Advanced Education, and the wide range of documents and literature available concerning the issue, provided sufficient data to carry out the policy analysis.

Document Analysis

Documents and current literature related to the development and current environment of postsecondary education in Alberta were selected and reviewed. Government documents, government and institutional position papers, journal articles and published books related to the historical development of the postsecondary institutions and the postsecondary system, the current program provisions and plans of the postsecondary institutions, and the level of demand for access to university degree education were initially reviewed to establish a background for the study. These published perspectives on factors affecting the issue of extending degree granting capability in the province formed the basis for the initial interviews. Relevant newspaper articles and recently published journal articles, and books were reviewed and incorporated into the findings. The findings of the document analysis are reported in Chapter 4.

During each interview, the respondents were asked if any relevant institutional documents, discussion papers or position papers were available which reflected the institutional position on the need to extend degree granting capability. In addition, the calendars and program information published by each institution were obtained. Both official and unofficial documents were readily provided by the respondents in the institutions if such were available. Analysis of these documents is incorporated into the data analysis of each stakeholder group response, as presented in Chapters 5 and 6.

Pilot Interviews

Utilizing the data obtained from the initial literature review as a framework, a pilot interview was conducted with the President of Grant MacEwan Community College, and informal conversations were held with a senior official of the Department of Advanced Education. These interviews established that the extension of degree granting capability was a significant issue in the province and provided confirmation and additional information on the aspects of this issue which required assessment in the study. The demand for undergraduate university education in the province was seen as steadily increasing, demonstrated by the rising application and enrollment rates in all postsecondary institutions offering university-level programming. A growing demand for provision of degree education programs in regions outside of the major urban centers was identified. Access to university education was seen as a major concern in the province, particularly in terms of the capability and interest of the universities in accommodating the demand for such education. The present numbers of students in college university-transfer programs is seen as exceeding the capacity of the universities to enroll these students in the third and fourth year of their undergraduate programs. These respondents believed significant controversy existed in the province about the need for, and the desirability and feasibility of accommodating the demand for university education; the selection of a particular way in which to address the demand and need for such education; and particularly in assessing the desirability and feasibility of the process of extending degree granting capability to the public colleges.

The Interview Process

The format of the interviews reflected the major research questions, and the particular factors identified from the literature as potential concerns, issues, or perspectives on the issue of extending degree granting capability. Efforts were made to ensure that each of the the informants representing each institutional group was asked to respond to the same basic questions. The question focus changed slightly for the respondents in the universities, based on the data analysis of the information collected from the college respondents, so as to address the particular issues which were evident from that data. The focus of the questions again was revised slightly prior to the interview conducted in the Department of Advanced Education, again so as to address the issues evident from the data collected to that date. The formats for all interviews are provided in Appendix A.

Phase 1 Interviews

Interviews were conducted with the Presidents and three of the Chairmen of the Boards of Keyano College, Medicine Hat College, Grande Prairie College, and Red Deer College between February 8 and February 20, 1989. No difficulties were encountered with arranging interviews within a relatively short time with the Presidents of these institutions; some difficulties in arranging interviews with the Chairmen of the Board were encountered, as previously discussed. All respondents agreed that the interviews could be tape-recorded, and subsequently signed release forms granting permission to use the data transcribed from these interviews in whole or in part. No respondents reported concerns regarding confidentiality of responses in reporting and analyzing the data.

The initial interviews were held with the President and Chairman of the Board at Keyano College. Following these interviews it became apparent that information about current university -transfer programs and other university programs offered at the college were readily available in calendars and information brochures available at each college. Therefore, questions related to this aspect were deleted from subsequent interviews. In addition, both respondents expressed a reluctance to comment on any other college's interest or plans in pursuing degree granting capability as they were unsure of their knowledge in this area. This question category was also deleted in subsequent interviews. The remaining interviews focused on specific institutional and community perspectives on the need for increased availability of degree completion programs, the specific issues affecting the college response to this need, the current plans of the college, and specific institutional and general community perspectives on extending degree granting capability to the college.

The interviews were conducted in a fairly structured manner in terms of substance and order of questions asked. At times, one aspect of a perspective, for example, the institutional or community view, would be emphasized more by one respondent in an institution than another. All respondents provided additional information and data in addition to responding to the interview questions, and were particularly open in discussing apparent differences in perspectives of respondents within the specific colleges, or between that college and another respondent college when such differences were identified by the researcher. Additional documents reflecting college plans and interests were provided when available.

A decision was made to utilize the data collected in the pilot interview with the President of Grant MacEwan Community College, conducted in November, 1988, as the data for this college in round one. This interview had addressed the questions asked in the later interviews at the colleges, the transcript of the pilot interview was thoroughly edited, and additional written information to clarify the responses to the interview questions was provided by the President.

The findings of these interviews are reported in Chapter 5.

Phase 2 Interviews

Interviews with the Presidents of the University of Alberta, the University of Calgary, Athabasca University, and the University of Lethbridge, and with the Associate Vice-President (Academic) of the University of Alberta were held between May 27 and July 7, 1989. No difficulties were encountered in arranging interviews with any of the selected respondents in this phase of the study. Difficulties were encountered in arranging interviews with the additional respondents suggested by two of the Presidents; three suggested respondents did not respond to repeated requests for interview; one suggested respondent was not available for interview until December 1989. Therefore only one additional respondent was interviewed.

All of the respondents emphasized that their responses should be considered personal opinions, unless it was stated as a published institutional position. All were willing to have the interview tape-recorded, and subsequently signed the release forms permitting the researcher to utilize the data. No additional documents were provided during this phase of data collection.

The questions utilized in the interviews of the university respondents reflected the basic research questions developed for the study but were slightly more focused, based on the findings in Phase 1. In addition to the more general questions regarding demand for baccalaureate education, and the need, desirability, and feasibility of extending degree granting capability, the respondents were asked specific questions as to their institution's capability to meet the need for such education both within the institution and on a regional basis; the effects of institutional plans on undergraduate enrollments and transfer capability; and their personal or the institutional view of other models of provision of regional degree programs.

Phase 3 Interviews

Following analysis of the data obtained in the interviews with the university respondents, the Deputy Minister and the Assistant Deputy Minister, Policy and Planning, of the Alberta Department of Advanced Education were interviewed together on July 27, 1989.

In this interview, the researcher asked specific questions as to the Department's view of the major issues regarding provision of baccalaureate education which had been identified by the college and university respondents. These issues included the need for increased numbers of baccalaureate degree graduates in the province, the system capability to meet such needs; the transfer issues; regional needs and perspectives on baccalaureate education; definition of a baccalaureate degree; and departmental positions on extension of degree granting capability and other models for extending degree program provision.

Again, the respondents were concerned that the information provided in these interviews be viewed as personal opinion, unless specifically stated as a Departmental position. No concerns were expressed with the confidentiality provisions; and the consent forms to use the information contained in the interview transcripts were signed and returned.

The findings of the Phase 3 interviews are reported in Chapter 6.

DATA ANALYSIS

A combination of quantitative and qualitative methodologies in data collection and analysis was used in this study. Firestone states the two methodologies are not antithetical. "They present the reader with different kinds of information, and can be used to triangulate data to gain greater confidence in one's conclusions" (1987, p. 16). Jick (1979, p. 604) also asserts that the robustness or stability of findings is enhanced by the use of both qualitative and quantitative methods to assess the same issue. Content analysis techniques, comparative analysis techniques, and a modified assumptional analysis procedure were used in data analysis. A specific analytic framework in which the techniques used to analyze and report data were incorporated into the elements necessary for prospective policy analysis was developed. An acceptability rating scale to determine the most feasible policy solution to the issue of extending degree granting programs was developed.

Data Analysis Procedures

Content Analysis

Both the transcribed interviews and the documentary data were subjected to content analysis procedures. Categories for data reporting and analysis were developed based on the conceptual framework and the research questions. Sub-categories in each data collection phase varied slightly due to the particular perspectives of each of the respondents. The major data reporting categories are as follows:

1. Perceptions of Demand and Need for Access to Baccalaureate Degree Programs

   This category includes the socio-economic factors affecting demand for baccalaureate degree programs, the participation, enrollment, and application rates for university programs currently reported by the institutions, projections of future enrollment demands, and perceptions of the capacity of the current universities to meet both the current and future demands for undergraduate education.

2. Perceptions of the Need to Increase Provision of Regional Baccalaureate Programs

   The regional perspectives on equity of access to undergraduate programs, perspectives on the adequacy of provision of undergraduate programs in non-urban areas, and the socio-economic factors associated with regional demands for baccalaureate program provision are included in this category.

3. Quality in Baccalaureate Education

   Elements seen as necessary for high quality baccalaureate programs, issues in maintaining high quality in baccalaureate programs, and the ability of institutions to provide high quality programs are identified.

4. Perspectives on the desirability of extending degree granting capability to the public colleges

   This category includes the overall position of each respondent, and particular factors seen as affecting the desirability of such extension, including economic considerations, effect on institutional roles and mandates, quality of programs, and effects on the system of postsecondary education.

5. Perspectives on the feasibility of extending degree granting capability to the public colleges.

Perspectives on institutional and system capability to support extension of degree granting capability, including human and financial resource requirements; and justification of such extension are included in this category.

6. Alternate models for extending provision of degree programs.

Respondents perspectives on alternate models or policy solutions to respond to the issue of extension of degree program access, and the desirability and feasibility of these alternate models for implementation in Alberta form the basis for this category.

These data categories and the content analysis determined from the original transcript of sample interviews with the college and university respondents were reviewed by the researcher's thesis advisor and two student colleagues. These reviews resulted in creation of the "Quality in Baccalaureate Education" data category, as this theme was evident in all other categories. These reviews also assisted in verifying that the choice of content for the data categories and the reporting style were accurate reflections of the interview responses.

These data categories form the framework for the report of the findings of the selected college respondents in Chapter 5, and of the university and Department of Advanced Education respondents in Chapter 6.

Comparative Analysis

Comparative analysis of the interview and documentary data was conducted throughout the data collection process, in the data analysis conducted at the end of each phase of interviewing, and in determining the synthesis of data forming the final aspect of data analysis. As described by Vierra and Pollock (1988), comparative analysis allows researchers to assess the frequency of behavior, responses, or events, which assists in determining the significant elements in the setting. In the process,

> researchers look for similarities and differences between new data they have collected and previous observations recorded in the field notes.
>
> [Comparative analysis] enables researchers to avoid bias, check facts, examine their data for consistencies and inconsistencies, and discover the most salient features of their research settings. (p. 219)

The researcher's supervisory committee assisted in the comparative analysis process through review of findings, identification of further respondents, and identification of particular issues, assumptions, perspectives, and models for extending degree granting capability that required further exploration through interview, document analysis, and literature review. This process increased the confidence of the researcher as to the accuracy and completeness of the data collection and analysis. Comparative analysis also assisted in determining the focus of the subsequent interviews throughout the study (as described in the section on data collection), in the development of the data reporting categories, in determining the commonalities and differences in stakeholder perspectives, and in determining potential feasible solutions to the issue of extending degree granting capability in Alberta.

Assumptional Analysis

Assumptional Analysis is a data analysis technique utilized by policy researchers to identify conflicting assumptions about a problem and potential solutions to the problem in a systematic and explicit way which "surfaces, challenges, and creatively synthesizes these assumptions to form a conceptualization of the problem" (Dunn, 1981, p. 130). The procedural framework outlined by Dunn (pp. 131-133) is as follows:

1. Stakeholder Identification. The selection of the key stakeholders is determined by an assessment of those groups or agencies which primarily influence or are influenced by a policy issue.
2. Assumption Surfacing. Potential solutions to the issue are identified, and supporting data and underlying assumptions for each solution are identified.
3. Assumption Challenging. The sets of recommended solutions to the problem are compared and evaluated by challenging the assumptions underlying the solution with counterassumptions. Plausible assumptions and counter-assumptions which might serve as a basis for problem conceptualization and solution are identified.
4. Assumption Pooling. The most important and most uncertain assumptions are priorized according to their importance to different stakeholders, and analyzed as to their relationship to the proposed solutions. Identified solutions incorporating these assumptions are priorized in terms of the relative certainty and importance to the various stakeholders.
5. Assumption Synthesis. Feasibility assessment which incorporates forecasted stakeholder behavior in terms of acceptance, opposition or indifference to a proposed solution, and development of potential acceptable solutions is undertaken. Composite solutions are then generated.

This technique incorporates both quantitative and qualitative techniques of sorting and coding data in order to determine feasible solutions to the issue. The technique was modified for use in this study, by restricting the application to the perspectives of the stakeholders and drawing potential solutions, assumptions, projections of feasibility, and priority ranking of solutions from the interview and document data, rather than involving the stakeholders in all phases of the analysis through repeated contacts.

The Analytic Framework

The framework for data analysis and synthesis developed for this study is an application of the conceptual framework of prospective policy analysis to the specific research questions identified. The framework consists of five identified elements and processes:

1. The Significance of the Issue in Alberta (Issue Description)

   The beliefs, assumptions, and facts evident in the key stakeholder perceptions of the need for extension of degree granting capability in Alberta, and the major considerations and constraints which directly affect perceptions of how or if such extension should occur are identified through content analysis procedures.

2. The Desirability and Feasibility of a Policy to Extend Degree Granting Capability (Issue Identification)

   The similarities and conflicts in the opinions and perspectives of the key stakeholders regarding a policy decision to extend degree granting capability are identified through a process of content analysis and comparative analysis. Specific sub-issues which must be addressed in policy development are identified.

3. Proposed Policy Solutions (Issue Aggregation)

   Models for extending degree program provision as proposed by the key stakeholders, or reported in the literature, were identified through the process of content analysis. Four categories of possible policy solutions were identified. Sixteen specific models for extending degree program provision were identified and placed in these policy solution categories. Each proposed model was subjected to two steps of the Assumptional Analysis technique, Assumption Surfacing, and Assumption Challenging. The commonalities and differences in assumptions and perspectives of feasible solutions were then identified.

4. Feasible Policy Alternatives (Assumption Synthesis)

Twelve factors determined to directly affect the acceptability to the stakeholders of the various models, and therefore the feasibility of implementation of each model as a policy solution were identified. A rating scale was developed to quantify the acceptability level of each model to the stakeholders. Each model of extending degree programs was rated on each factor. An overall rating of acceptability was determined by the addition of the factor scores. To test the validity of the ratings obtained and increase the confidence level in the identification of the most acceptable policy alternatives, each model was reassessed as to its overall acceptability by applying different weightings of the factors to the determination of the overall acceptability score.

The ratings of each model are reported in Chapter 7.

5. Recommendations for Policy Development

The application of the factor rating scale to the models consistently resulted in findings of significantly higher levels of acceptability for the capstone and cooperative/brokered models of joint university-college degree program provision, than for any other model or category of policy solution. The recommendations for policy development reflect this finding, and include a discussion of the projected institutional responses, political decisions required, and potential outcomes of this recommendation.

VALIDITY AND RELIABILITY CONSIDERATIONS

The focus of qualitative case study research is on portraying the perspectives of informants about a particular event, issue or experience (Merriam, 1988, p. 165), and

> if understanding is the primary rationale for the investigation, the criteria for trusting the study are going to be very different than if discovery of a law, or testing a hypothesis is the study's objective. (ibid.)

This stance is supported by several other authors (e.g., Vierra & Pollock, 1988, Guba & Lincoln, 1984; LeCompte & Goetz, 1982). The validity, reliability and generalizability in qualitative research is seen to be enhanced by "specification of methods, roles, selection and sampling of units, and analytic techniques" (Smith & Glass, 1987, p. 278).

To increase the validity of such studies, these authors believe that "credibility, plausibility, and trustworthiness" of the data and conclusions should be the major aims of the research (Vierra & Pollock, 1988, p. 224). These aims can be achieved through various strategies which determine if "the interviews were reliably and validly constructed; if the content of the documents was properly analyzed; and if the conclusions rest upon the data "(Merriam, 1988, p. 165). Smith and Glass believe that "logical validity" occurs if it is evident that the conclusions are supported by "a convincing and carefully reasoned connection with the descriptive data" (1987, p. 278).

Several strategies are suggested to increase the validity of qualitative studies. Triangulation is one such strategy, in which a proposition, issue, concern, fact, or assertion of an informant is exposed to possibly countervailing facts or assertions, or is verified with data drawn from other sources or developed using different methodologies (Guba & Lincoln, 1984, p. 105). Comparing, contrasting, and/or verifying information collected from different participants on the same topic or event, or obtained through different methodologies are identified as effective triangulation methods (Smith & Glass, 1987, p. 275; Guba & Lincoln, 1984, p. 257). Triangulation "allows for multiple value perspectives to emerge from the same context or event, and allows for their explication and presentation alongside each other" (Guba & Lincoln, p. 257). Inviting another researcher or colleague to observe the case directly, or read and categorize the data record to see if the same, or similar, conclusions could be reached by this second observer is a second recommended strategy. Careful design of the data collection and analysis methods to increase objectivity and decrease the potential for researcher bias, and external audits by colleagues of the design, findings, and conclusions enhance the validity of the study.

The reliability of the study, or the extent to which the findings can be replicated, is not considered by the authors identified above as an appropriate or feasible criterion for qualitative case studies. Lincoln and Guba (1985, p. 288) equate reliability to dependability or consistency of the data findings rather than to replicability of the findings. This viewpoint is supported by Merriam, who argues that case studies of multifaceted, contextual phenomena inherently rule out repetition of identical results on study replication (1988, p. 171). She believes that "seeking concurrence of outsiders that, given the data collected, the results make sense" is a valid measure of consistency and dependability (p. 170). The dependability of the findings is dependent on a "rich, thick description," the assumptions and theories forming the basis for the study, the selection process utilized to chose data sources, the characteristics of the participants, and the physical and social context of the data gathering environment, and the research methods, analytic categories, and decision-making processes utilized in the study (LeCompte & Goetz, 1982, pp. 37-40; Merriam, 1988, pp. 172-173).

Inability to provide external validity or generalizability is generally considered a limitation of case studies. Merriam states the concept of "reader or user generalizability" is valid, however (p. 177). This type of generalizability requires provision of a rich, thick description so that individuals have a base of information from which to make appropriate judgements about the reasonable nature of the findings, and the transferability of such findings to other phenomena (Lincoln & Guba, 1985, pp. 124-125).

Measures to Enhance Validity and Reliability

Measures to increase the validity of the study included the use of a predetermined semistructured interview format, with all interviews tape-recorded and a verbatim transcript produced. The individual verbatim transcripts were returned to each person interviewed for editing, correction, addition, or deletion. An abstract describing the research study was provided to each respondent orally at the beginning of each interview, and in written form with the transcript of the interview. A consent form granting permission for the researcher to use the interview data in either summary form, or as a direct quote, subject to the respondent 's specifications of corrections, deletions, or additions was signed and returned by each individual interviewed. A copy of the consent form is provided in Appendix B. In this way, researcher bias was felt to be controlled to a degree, and the accuracy of the interview responses was ascertained. The content analysis procedures applied to both documents and recorded interviews involved development of coding categories determined from assessing patterns in the data, which reflected and amplified the research questions, and indicated particular issues or perspectives which would directly affect policy development. The categories, a selected sample of verbatim transcripts, and the report of the findings were reviewed by three other researchers (as mentioned previously) to verify their validity. Validity of this study may be adversely affected by the small sample size, and the refusal of one major urban college and the majority of the College Board Chairmen to participate in the study, which may result in a somewhat biased presentation of perspectives within the province. Attempts to control such bias occurred through comparative analysis procedures to identify similarities and differences in responses, and in identifying missing information or perspectives and facts which required further clarification through document analysis or interviews of specific representative respondents. The comparative analysis process, the data analysis procedures and findings were all subjected to an external audit by other colleagues, and the findings cross-validated with data from other interviews, with available documents, and with current literature.

Provision of an explicit description of the researcher role, the context in which the study was conducted, and the design and conduct of the study are the measures used to increase reliability or dependability of the findings. The identification and description of the assumptions and theory underlying the study; the historical, political, socio-economic, and physical context of the data collection environment; the identification and description of the strategies used for decision-making in data collection and data analysis; and the explicit description of the coding categories and analytic framework used in data analysis should increase the reliability through defining the role of the researcher and providing a clear explanation of the conduct of the study. The use of different analysis strategies, cross-validation of the findings, and confirmation of the accuracy of the recorded responses by each individual interviewed increases the dependability of the findings, as does the external audit of the data collection and analysis procedures and findings by the researchers' supervisory committee.

The Assumptional Analysis technique increases the validity and reliability of findings by systematically involving key stakeholders in both identification of the issue parameters and in development of issue resolution strategies; by systematically identifying strongly differing views of the issue and solutions; by focusing on underlying assumptions rather than surface characteristics of an issue; and by focusing to the maximal extent possible on the same sets of data (Dunn, 1981, pp. 130- 133). Dunn believes this technique is "one of the most comprehensive and systematic methods now available for formulating creative or novel solutions to an ill-structured problem (p. 132), and that it is a powerful method for reducing the probability of errors of the third kind (p. 134). The modifications of this technique in the study may not provide the same degree of validity and reliability as would full implementation of the technique as designed due to the non-inclusion of the stakeholders following initial data collection. The development of the rating scale to determine acceptability of proposed policy solutions should contribute to the validity and reliability of the study, by providing a clear description of the bases for the decision making process.

Reader or user generalizability as described by Merriam should be enhanced by the thorough description of the context, selection of respondents, and the data collection and analysis procedures, and provision of exact formats and frameworks used in data collection and analysis. No attempt is made by the researcher to claim generalizability of this study to other postsecondary systems or to other postsecondary educational institutions within the province which are not represented in the study.

ETHICAL CONSIDERATIONS

Merriam points out that ethical dilemmas occur in qualitative case study research at two points: during collection of data and in the dissemination of findings. In particular, she describes five specific ethical problems:

> 1. the researcher becoming involved in the issues, events, or situations under study
> 2. problems with maintaining confidentiality of data
> 3. problems stemming from competition between different interest groups for access to and control of data
> 4. problems concerning publication, such as the need to preserve the anonymity of subjects
> 5. problems arising from the audiences being unable to distinguish between data and the researcher's interpretation. (1988, p. 179)

This study was designed to conform to the ethical guidelines established by the University of Alberta General Faculties Council and by the Department of Educational Administration. Particular consideration was given to obtaining consent from the interview respondents to utilize the data even though confidentiality and anonymity could not be maintained in the study. An increase in lobbying for an institutionally or individually preferred policy solution utilizing selected study data is a potential consequence of conducting this study. Identification of particular respondent's opinions and perspectives may create some difficulties for the respondents in their interactions with other institutions and government representatives and departments.

Measures taken to address these ethical concerns, in addition to the informed consent process, included a deliberate attempt by the researcher to not reveal during the interviews the specific source of a perspective on the issue which differed from the interviewer's views; clarification with each interview respondent of the formal purpose of, and the respondent's purpose in providing any additional documents to the researcher; reporting of findings as reflecting institutional rather than personal perspectives as much as possible; separation of the reports of the interview findings from the interpretation of the findings; development of recommendations to assist readers in distinguishing between the data and the interpretation; and provision of the final chapters of the thesis reflecting the reports of the data findings, interpretation and recommendations to all interview participants, or a copy of the complete thesis if the participant so desired.

SUMMARY

Rich, thick description of the entire research process is emphasized by leading qualitative researchers as essential for increasing the validity, reliability, and generalizability of qualitative research studies. The intent of Chapter 3 was to provide a detailed description of the theoretical framework for the research design, of the research procedures used, the problems and issues encountered, the assumptions made, the decisions made, and the measures taken to address the validity, reliability and ethical concerns during the conduct of this study, in order to meet this essential requirement.

The theoretical framework for the study is that of prospective policy analysis. The study is designed as a qualitative case study of whether or not extension of degree granting capability in Alberta is a required, desirable, or feasible policy option to ensure equitable access to undergraduate degree programs. Following an initial literature review to establish that extension of degree granting capability was a significant policy issue in Alberta, pilot interviews were conducted to confirm the significance and to define the parameters of the study.

Interviewees were selected by a process of purposive sampling, based on identification of the most knowledgeable, and/or accepted spokesperson in each selected institution or agency. The Presidents of all selected institutions, the Deputy Minister and Assistant Deputy Minister, Policy and Planning, of the Department of Advanced Education, and three Chairmen of the Board of the selected public colleges were interviewed. The Alberta Department of Advanced Education was identified as essential for inclusion in the study based on the responsibility of this department for the postsecondary educational system in Alberta. Institutions were selected for the study through criterion-based sampling. The criteria used in this selection were as follows: a) the institution offered two years or more of university level programs; b) it was deemed likely to have the resource base necessary, and considerable political influence on policy development concerning extension of degree granting capability for provision of undergraduate university degree programs in a wide variety of disciplines, and c) it was located in one of the major regions of the province. The private colleges were excluded from the study because they operate within a legal framework through which these colleges can become degree granting; the technical institutes were excluded based on an assumption that degree granting for these institutes would be in specialized rather than general areas. Six public colleges in the major urban and rural regions of Alberta were selected; one major urban college declined to participate. All four universities are represented in the study.

Data collection was carried out through document analysis prior to and concurrent with the interviews. Semi-structured interviews with the identified respondents were conducted in three phases: college respondents, university respondents, and finally the respondents for the Department of Advanced Education. Content analysis and comparative analysis procedures were used in analysis of both the document and interview findings, and in determining the particular formats for each phase of interview. External audits of the data collection procedures, development of coding categories, and interpretation and reporting of findings were conducted throughout the study.

The analysis of the data and the development of policy recommendations were conducted according to an analytical framework consisting of five elements: the description of the issue, reflecting the perspectives of the stakeholders, and the major considerations and constraints in considering a policy to extend degree granting capability; identification of the issue, that is, the similarities and conflicts in the stakeholder perspectives on the desirability and feasibility of extending degree granting capability; identification and analysis of proposed policy solutions; determination of feasible policy alternatives; and development of recommendations for policy development.

Measures to enhance validity and reliability of the study include triangulation, external audits, and provision of detailed descriptions of the context of the study, the stakeholder perspectives, and the research methodologies and processes. Ethical concerns regarding potential negative effects on the participants of the study which could result from the fact that anonymity and confidentiality of responses could not be maintained are recognized. The political tensions between institutional sectors and between institutions and the government could be increased as a result of this study. Interview respondents' approval of interview transcripts, and provision of formal consent to use the data so obtained were the major strategies used to address the ethical concerns. The researcher will also provide a copy of the findings and recommendations of the study to each respondent.

CHAPTER 4

THE ALBERTA CONTEXT

Chapter 4 provides a description of the changing policy environment regarding provision of university education in the Province of Alberta, based on a review of historical documents, government position papers, newspaper articles, institutional calendars, and position papers. A review of the historical development of university education, the public opinions and values evident during the development of postsecondary institutions, and government policy decisions and their effect are initially discussed. The historical description includes the 1980 to 1988 time period. Secondly, a brief explanation of the current and projected demand for university education, the current enrollment levels in university programs, and 1989 perspectives on increasing the accessibility to such programs in the province is provided. Finally, the development of roles and mandates in university education, the current university-transfer programs and the entry requirements for these programs in each public college represented in the study, and the entry requirements and transfer provision of each of the universities in Alberta are described. The major factors affecting issue resolution and policy development based on this document analysis are outlined in the summary of the chapter.

HISTORICAL PERSPECTIVES

The following section should not be considered a complete review of the history of the development of postsecondary education in Alberta. The purpose of this section is to identify the events and factors in the development and provision of university-level education in the province which may directly affect the perspectives of the Alberta public, postsecondary institutions, and the Alberta Department of Advanced Education in assessing the issue of extending degree granting capability to the public colleges.

1905 to 1945: Centralization versus Regionalization of University Education

The first four decades of postsecondary education in the province demonstrate that conflicting viewpoints on the provision and control of university education within Alberta began with the establishment of the University of Alberta, and these conflicts were not resolved during this time period.

The University of Alberta was created in 1906 by the Alberta Government as "the University for all Alberta, not just a particular region" (Aalborg, 1966, p. 1). This provincial university was modeled after the land grant colleges in the United States which were established to emphasize extension work and applied research, in addition to traditional university functions (Anisef, 1985, p. 28). The government believed the needs for university education in the province could be satisfactorily met by centralizing university education in one institution. This concept of centralization was also extended to postsecondary technical education through creation of one institution, the Calgary Institute of Technology and Art, to serve the entire province. Private colleges, established by various religious groups prior to the formation of the university and technical institute, were restricted to secondary schooling and theological training. The only decentralized regional post-secondary educational services were teacher training and agricultural education programs. Regionalization of these programs was seen as essential in order to keep individuals in their home regions, and to ensure that such education was "practical" rather than "research oriented" (Berghofer & Vladicka, 1980, p. 11).

The public, particularly the citizens of Calgary, although not totally opposed to the concept of centralization, were astounded by the location of the University in Edmonton, as Calgary was seen as the "center" of the province (Weston, 1960, p. 1). A campaign for decentralization of university education began. The immediate result was the establishment of a Royal Commission by the Government of Alberta to assess the problem. This commission supported the one university concept, but recommended that some decentralization of university education occur, with control of such education firmly placed with the University of Alberta. The University Acts of 1906 and 1910 established that university-level education could be provided by the private colleges, and other approved educational institutions in the province, through a process of affiliation with the University of Alberta. Sole authority in establishing the standards and modes of these programs in the colleges was delegated to the University of Alberta. University-level programming in the Arts, Sciences, and Engineering was subsequently offered by Mount Royal College in Calgary (a private college at this time).

During the depression, the demand for technical and vocational training fell, and federal and provincial government support was reduced. Demand for university-level programming increased, although at a slower rate than in the previous decade (Kun, 1983, p. 12). This increased demand was reflected by the application of Mount Royal College in 1930 to offer an extended range of arts and science courses in affiliation with the University of Alberta. In response to the demand for regional provision of university programs, the School Act of 1931 granted approval to school boards to establish public junior colleges to provide university education in affiliation with the University of Alberta.

> The University of Alberta was thus not merely the premier educational institution in the province; it occupied a controlling position at the apex of a provincial system of post-secondary education. (Leslie, 1980, p. 80)

These events resulted in the University of Alberta developing an explicit set of regulations through which affiliation would be granted. These government- approved regulations required affiliating institutions to meet the University standards for staff, library and laboratory facilities, and to use University-developed examinations in their university-level programs. A hierarchy of institutions was established, with all non-university institutions assuming junior status to the University.

The campaigns by Calgary residents to obtain a degree granting institution for that city was based on the belief that both economic and social benefits result from the presence of a university in a city (Weston, 1960, p. 1). Given the lack of success in obtaining a separate university, campaign efforts began to focus on other ways of obtaining university education in the city -- through private colleges such as Mount Royal, through creation of public junior colleges to provide university-transfer programs, and through a lobby for approval of university-level arts and science programs to be incorporated into the Institute of Technology and Arts. The latter efforts were the first evidence of the belief that comprehensive institutions, providing both university and non-university postsecondary education, were acceptable and feasible mechanisms to meet provincial postsecondary needs.

1945 - 1960: Controlled Expansion of University Education

Alberta underwent a rapid transformation from an agricultural to an urban industrialized society following the Second World War. Industrial expansion necessitated by the war was given further impetus in Alberta by the discovery of oil. The resulting oil boom led to a great provincial need for higher education, particularly in the requirement for increased numbers of individuals prepared with technical and professional skills. Demands for increased social equality were an outcome of the war in all parts of North America. The principle of egalitarianism underlay the increased social demand for democratization of social and economic opportunity through expansion of higher education services to increasingly accommodate students from diverse economic and social backgrounds (Dennison & Gallagher, 1986, p. 18; Fleming, 1980, pp. 104-105).

The Social Credit government put "enormous emphasis on education, particularly higher education as a basis for economic and social growth in the province" (Winchester, 1984, p. 42), and began to decentralize some aspects of the higher education system in the province.

Creation of the University of Alberta at Calgary

In 1945 the government decided to transfer teacher training from the Normal Schools to the University of Alberta. In order to maintain access to teacher education in the southern part of the province, the Calgary Normal School was converted to a branch of the University of Alberta. Immediately, a committee of Calgary citizens began to press the government to establish a fully autonomous university in the city (Weston, 1960, p. 10). The outcome of this lobby was approval by the Department of Education, and the University of Alberta, to offer two years of teacher education, plus first year Arts and Science courses related to a Bachelor of Education degree. The Calgary branch, with strong support by the Calgary citizens, immediately began to expand its program offerings and facilities.

Concurrent with the Calgary demands, however, were increasing demands for more equal access to higher education throughout the province. "It became evident that if educational opportunities beyond high school were to be expanded either the universities would have to increase in size or number, or alternative institutions would have to be created" (Dennison, 1984, p. 142). Growing interest was expressed in the American model of higher education which "embodied a more egalitarian and democratic approach to post-secondary education through the development of multi-purpose, highly accessible alternatives to the traditional universities" (p. 141). State universities, which focused on undergraduate teaching, small, regional, liberal arts colleges, and the junior college concept were the most commonly discussed models for providing regional university education.

Colleges as an Alternate Route for University Education

The government initiated discussions on the acceptability of the American junior college model partly in response to local pressure by Lethbridge citizens who "had for years aspired to have a university established" (West, 1982, p. 89) The initial design of these colleges was established at a meeting of Lethbridge representatives, representatives of the University of Alberta, and Government representatives in 1956. These representatives concluded that a college would be viable in the Lethbridge region, and clearly established the perceived role of the junior college:

> [There was an emphatic statement that] a college must particularly meet the needs of students wanting university training, and then others desiring vocational and technical education. It seems to me that sequence puts the formation of the first public junior college in Alberta into perspective -- preparation of students to continue university work at a university was the first priority. Secondarily, some non-university courses were to be considered. (Mowat, 1988, p. 55)

The University of Alberta representatives clearly indicated the desire of the University to maintain control of the development of these institutions, and their desire for junior colleges to be developed which would function as university-transfer organizations. The University of Alberta proposed that colleges could be established in one of several forms: a branch of the University, as in Calgary; an affiliated college; or a college under the direction of a local authority which may or may not be recognized by the University (Johns, as cited in Campbell, 1977, p. 73). A clear preference was stated by Dr. Johns at this meeting:

> It might be best to begin with a Junior College under the direction of the University, partly because of the guidance that the University would be able to offer... and partly, because more assistance might be forthcoming from the Government through the University in the initial stages. (p. 75)

The government, however, believed the colleges should offer university-transfer and vocational programs, and be directly under the control of the Department of Education. President Johns reiterated his support for public junior colleges (as compared to community colleges) and the need for affiliation of the public and private junior colleges with the University as follows:

> The growth of public Junior Colleges is likely to become a significant feature of higher education in this Province and should be fostered and assisted by the University and the Provincial Government providing they have strong local support. Private Junior Colleges should also have the right to affiliate with the University if they are able and willing to meet the University's standards for such affiliation. ... These alternate routes [public and private junior colleges] in post-secondary education might place less stress on freshman work and place more emphasis on teaching of senior classes and professional and graduate education at the University of Alberta. (Johns, 1963, p. 6)

The College Act of 1958 reflected the influence of the University of Alberta on the government, in its requirement that a junior college must have an affiliation agreement with the University of Alberta prior to its beginning operations. The government, however, did not totally subscribe to the University and community views; the Act also required these institutions to offer technical and vocational programming in addition to university programs.

Despite the Act requirements, the first colleges in Lethbridge, Medicine Hat, Red Deer, and Grande Prairie offered university-transfer programs almost exclusively. Berghofer and Vladicka (1980, p. 24) accounted for this in terms of the high local demand for university education, and the greater prestige with which it tended to be viewed. Gregor further amplifies the community view of the need for university-level programming in the regional colleges

> As in the United States, the argument was a persuasive one that students geographically removed from the universities might justifiably be provided with at least the junior years at a local level, postponing the expensive move to a university to the more specialized senior years. Distinct regions unblessed by a local university should at least be entitled to a college that would reflect local needs and be an identifiable center for local students. (1979, p. 37)

Between 1945 and 1960, significant political views on postsecondary education and its appropriate provision in the province were established. Although several commissions, surveys, and position papers of the provincial government concluded that the major need in Alberta was to decentralize non-university programming, both the private and public colleges continued to lobby for degree-granting capability. The belief of Albertans that the most feasible way to provide university education in the regions would be through the development of comprehensive institutions remained evident. The founders of Lethbridge Community College proposed that it should be

> An institution to serve all the people in the College district, with a long range goal of working towards a degree-granting liberal arts and technology college, offering three year programs in both aspects. (Holmes, 1972, p. 9)

1960 to 1970: Further Expansion and Decentralization

At the beginning of the nineteen-sixties, the Alberta Government was faced with a rapidly expanding system of higher education in the province, with on-going demands for creation of additional institutions and/or increased provision of university education by the existing institutions. Conflict regarding appropriate roles and program offerings of the established postsecondary institutions, the need for additional institutions, and the overt control of the University of Alberta on these institutions was increasingly evident.

By 1962, the University of Alberta - Calgary offered complete Bachelor of Education, Science, and Arts degrees; two years of the Bachelor of Commerce and Engineering degree programs, and the first year of Nursing, Home Economics, and Agriculture degree programs. In addition, a limited number of students were pursuing post-graduate work (Weston, 1960, p. 11). The campaign to create an autonomous university at Calgary intensified. This campaign generated considerable conflict with the University of Alberta, which was not in favor of Calgary gaining autonomy at this time:

> I should like to make it clear that complete autonomy and separation should not reach the point of our having two separate Boards of Governors appealing to the Government in a competition for funds. This is a matter which should remain, as far as possible, in the hands of a University Committee which would make its recommendations to one Board of Governors. (Johns, 1963, p. 4)

The Government began to consider creating the University of Calgary as a separate institution. The Deputy Minister of Education, Dr. W. H. Swift, stated: "It seemed to me, however, having regard to the increasing responsibilities being transferred to Calgary, and the general climate of opinion there, that the time for autonomy had come" (1981, p. 36).

The role of the junior colleges was also creating concern for the government. The government had expected the colleges to develop into comprehensive institutions offering both university-transfer and technical training. The colleges, however, had remained primarily university-transfer institutions. Furthermore,

> as new colleges came into being and enrollments expanded, it became evident that the colleges aspired to be not solely a community college but rather a dwarfed form of something grander. There was evidence that

> colleges anticipated, in due course, being elevated to university status and that already they were laying the groundwork. (Campbell, 1977, 164-165)

The government then, in 1965, was faced with a situation of increasing demand for university education, creation of additional universities, a developing need for non-university post-secondary education which was not being met by the colleges, and a steadily developing atmosphere of resentment of the control of the University of Alberta on higher education within the province.

Requests for a Conversion of Colleges to University Status

The perceptions and beliefs of the junior college regions as to the further appropriate development of postsecondary education is exemplified by the actions of the Lethbridge Junior College and the citizens of Lethbridge. The community and junior college board repeatedly presented briefs proposing various forms of a university for Lethbridge throughout 1964. The finalized proposals incorporated the belief that the University should be created from the academic division of the Junior College. The rationale in each of the briefs reflected a belief that

> inasmuch as the level of education in any nation today is a major factor in determining the economic growth and stability of that nation; the provision of adequate University facilities is a most important investment in the future of Canada. The accelerating growth in student population in the Province of Alberta has created an urgent situation which must be met with speed, farsighted planning and immediate action.
>
> The decentralization of University facilities in the province of Alberta has now become mandatory. (Sherring, Cooper, Lomas, Christou, Watkinson, & O'Connell, 1964)

The elevation of the college to university status was based on belief that the junior college had a high academic achievement record, was well accepted by the community, and provided the most cost-effective way to provide university education in southern Alberta (Lethbridge Junior College, 1964). The University of Alberta response was that a full university was not needed, but to meet the perceived need for university education, consideration could be given to approval of a second year of university programming at the junior colleges. General Faculty Council granted approval in principle that a second year of university-transfer studies could be provided by the colleges, given that the colleges agreed to additional regulations governing affiliation and granting of advanced credit for students:

> The usual practice of examining and approving books available in the library and the laboratory facilities, equipment and materials [must continue].
>
> The courses offered in the second year at Lethbridge Junior College must have their counterparts in the calendar of the University of Alberta, Calgary. For the present, Lethbridge Junior College should not offer Honors programs nor Honors courses.
>
> Candidates for appointment as junior college instructors in courses beyond the first university year must possess qualifications substantially beyond the Master's degree in the subject of instruction. (Johns, 1965)

This response heightened the conflict between the university and the colleges. The colleges felt "there was not a thing they could do that did not need the approval of the university" (Byrne, cited in Campbell p. 168) and questioned why the university should have authority in determining their programs and staff qualifications. The university was perceived to be "primarily interested in a junior college, with control of courses to meet the university's own degree requirements" (ibid.).

The Government continued to see a major need for development of non-university courses in the colleges, and felt that there was no apparent interest in the colleges in meeting that need (p. 169). The Minister for Education, Mr. Anders Aalborg, determined that the role of the colleges required examination, as did the relationship of the colleges to the University. He established a Survey Committee on Higher Education, consisting of members of the Government and of the University (Aalborg, 1966). The Survey Committee appointed Dr. Andrew Stewart to study these issues.

The Special Study on Junior Colleges 1966: What Should Be Their Role?

Dr. Stewart was asked to investigate the role of the junior college in meeting a variety of local educational needs. Specifically, the Survey Committee requested examination of the role of the junior college in providing technical, vocational and adult education courses, together with a study of development and expansion of university education in Alberta. In regard to the second aspect, Dr. Stewart was directed to assess the relative merits of three specific ways to meet the demand for university degree programs: through creation of junior colleges affiliated with universities, through satellite campuses of the University of Alberta, or through independent degree granting institutions (Stewart, 1966, p. 7)

The stance of the University of Alberta in this study is exemplified by the speeches of President Johns.

> We must remember that the University of Alberta is a provincial institution and not the private preserve of either the City of Edmonton or the City of Calgary. We must ensure that whatever is done serves the Province as a whole and the University as a whole in the best way possible. The object of the Government of Alberta and of the Board of Governors must always be the best interest of higher education in the Province as a whole and not the aspirations of academic or civic communities for aggrandizement. To this end a concerted approach must be followed to meeting the needs of students at all levels of post-secondary education and the needs of the Province as a whole. (Johns, 1963, p. 3)

The colleges, on the other hand, demanded greater autonomy, particularly modification of the affiliation arrangements with the University of Alberta, and the right to determine program offerings.

> People in colleges and ratepayers and citizens interested in the development of colleges [wished to] gain a measure of autonomy with respect to two things: one, the right to decide, unilaterally, whether they were going into university work and, second, a broad agreement that work done in any college would be accepted with full credit in the university. (Mowat, as quoted in Long, 1979, p. 220)

The strength of some of Stewart's recommendations regarding the junior colleges, and degree granting status, may reflect his reaction to the briefs presented by the Lethbridge Junior College. The Faculty Association presented a brief which in part stated the following proposal:

> That the institution now known as the Lethbridge Junior College be granted autonomy in order to facilitate the development of a degree granting university of uniqueness and quality. (Lethbridge Junior College Faculty Association, November 1965)

The College Board supported the faculty association with a five-year plan for development of an undergraduate university through further development of the University Section of the Junior College. The Board based its recommendations on the findings of a study conducted by Harries and Associates, which concluded

> that a third University will be required in Alberta within the next decade. It is also concluded that Lethbridge is the most feasible location for the University and therefore, plans to this end should be formulated today so that the University of Alberta at Lethbridge may be operative by 1970. (Harries, 1965)

The colleges and their communities believed in the economic and social benefits to the community of an expanded college role, the necessity for local opportunities for higher education, and that "many young people who were not qualified to go to university or who would have difficulty in the first year of a larger institution would fare better in college" (Long, 1979, p. 220). Recognition of the need for non-university education had begun to be reflected in college and community reports but not to a significant extent.

The recommendations of the Special Study (1966) are summarized as follows:

1. The terminology and concept of junior colleges should be abandoned, and regional comprehensive colleges established under Boards of Post-School Education. This colleges would offer university-level, technical and vocational education.
2. University degree programs should be increased to four years from three, with the first two years of such programs to be taken at the district colleges, and the final two years at the degree-granting university.
3. Junior colleges should not strive to be degree granting institutions. Their main purpose should be non-university education at the post-school level.
4. Separate universities or branches of universities should be established in districts where they are needed. In particular, gradual development of a university in Lethbridge should occur. A separate institution should be created, initially as a branch of the University of Calgary, and eventually developing into an autonomous institution.
5. Government direction and coordination of the post-secondary system should be increased through creation of a Board of Post-Secondary Education.

The aims and expectations of the colleges and their communities are partially reflected in the report, as are the views of the University of Alberta. On the aims and expectations of the colleges, and the resultant report, Dr. Gordon Mowat makes the following observation:

> [The Stewart recommendations] that the first two years of university work be taken out of the university and spread around in a number of centres seem based in the college expectations. Stewart and his committee undoubtedly had several things in mind: the fuller development of regional services which would have economic impact throughout the province, and which would have political impact on educational opportunity throughout the province. (cited in Long, 1979, p. 221)

Stewart was critical of both the university focus of the junior colleges in Alberta and their aspirations for degree granting status, even though he displayed an understanding of the rationale underlying this focus:

> First, University studies carry with them a degree of social prestige which vocational courses do not possess. Second, the attention which has been given to the crisis of the universities and the recognition of the potential enrollments at the universities has created a general concern about the provision of facilities for university education. Third, the recent development of vocational schools and institutes of technology has seemed to served the needs for post-school technical-vocational education. Fourth, the financial support for university studies... has been relatively generous in relation to the costs. It appears that the pattern of concentrating on university studies has become established, and that the Junior Colleges as they are now developing leave a vacuum in post-school education.... (Stewart, 1966, 29-33)

Stewart believed the enrollment pressures at the Edmonton and Calgary universities required development of university education in other regions of the province but that "outside of Edmonton and Calgary there are few centres in which the complete separation of university and non-university studies would not result in uneconomical duplication of facilities" (p. 44). The Colleges and their regions, although supporting most of the Stewart proposals, disagreed strongly with the attempt to control degree granting capability of the colleges (Holmes, 1972, p. 75).

The University of Alberta responded to the Stewart Report through a report of the Academic Planning Committee (1966) and a position statement of the General Faculty Council. The Academic Planning Committee opposed the concept of requiring students to obtain their first two years of university education at a District College. The concerns focused on the lack of choice for students, the danger of providing an inferior form of education due to difficulties in attracting staff to the regional colleges, and lack of university supervision. The assumption made by Stewart that the University would "accept these students in the third year without penalty " (Stewart, 1966, p. 3) was considered a major error in the report because the University had never agreed to this.

The General Faculty Council supported the creation of district colleges to offer non-university two year programs but opposed provision of articulated university education in colleges located in regions containing a university. Colleges in districts without universities could be allowed to offer first year university work only "with the approval of the Coordinating Council and the Universities Commission" (p. 6).

Faced with opposition to the Stewart proposals from both sectors of the postsecondary educational system, the Government convened a conference on postsecondary education to discuss Stewart's proposal and the draft legislation which had been prepared based on these proposals.

Conference on Postsecondary Education, 1966

Three distinct points of view regarding post-secondary education, and particularly university education in Alberta, became apparent at the conference. The draft legislation, reflecting the government's view, provided for establishment of regional and provincial boards of postsecondary education to coordinate the development of regional comprehensive colleges. These colleges were to offer both university and non-university education. Significantly, this legislation also removed the requirement for university affiliation and approval for establishment of such colleges, and proposed lower entrance requirements for colleges than for universities (Berghofer & Vladicka, 1980, p. 25). At the request of the government, the University of Alberta Senate had established a committee to assess the needs for postsecondary and continuing education in Alberta, and prepare a report for the conference on postsecondary education. The Fact Finding Committee on Post-Secondary and Continuing Education in Alberta (1966) reported there was a major deficit in higher education for students who failed to qualify for university admission. This Committee recommended that a system of junior and regional colleges be developed to provide "second chance" and upgrading programs for such students.

The Junior Colleges were unsure of the effect of such programs on maintaining standards within the regular college programs (Fact-Finding Committee, 1966, p. 31). In addition, the Junior College representatives found the limitation of their programs to the first two years of a four-year university program in arts and sciences restrictive, and were opposed to any lowering of admission standards. Long (1979, p. 58) states these policies frustrated the ambitions of the colleges for degree-granting status and the establishment or expansion of professional programs.

The University of Alberta was opposed to the regional concept, the lowering of admission standards, and the loss of control of college programs, claiming that loss of quality in university programs would result. Opposing views of the role of colleges as university-transfer institutions, or as comprehensive institutions with a major focus on non-university education were a major point of contention (Berghofer & Vladicka, 1980, p. 26).

The conference participants did conclude that university influence and control of the college programs was excessive and, therefore, a new mechanism for coordinating the colleges was required. The draft legislation was withdrawn, with the exception of one aspect: the creation of a Provincial Board of Post-Secondary Education.

Meeting the Need for Additional Autonomous Universities

In response to the growing enrollments at the University of Alberta in Calgary, and the briefs from the community of Lethbridge, the Universities Act was proclaimed early in 1966 (Berghofer & Vladicka, 1980, p. 28). The Act established the University of Calgary as an autonomous institution. The Act also made provision for establishment of other autonomous universities within the province, gave the Universities Coordinating Council specific authority for determining affiliation agreements and standards for the colleges, and established the Universities Commission to coordinate the universities and advise the government of the needs of the university sector.

In August 1966, the Government announced that a university would be created in Lethbridge. Confusion as to what type of university this institution was to be resulted.

> When Lethbridge was established, there would seem to have been an implicit understanding that it would be patterned after the three year liberal arts colleges. Dr. Byrne said that the University of Lethbridge was really a political decision. Those making the decision probably thought of it as an expansion of the Junior College to a four year institution. ... Others thought the University should be a teaching institution on the model of the state colleges in California. (West, 1982, p. 73)

The end result was a decision that the University would be a separate institution with its own Board of Governors, created by the transfer and development of the university section of the Junior College.

This created interest in the City of Red Deer from which similar proposals soon emanated. Proposals for development of a fourth university in the Edmonton area were also forwarded to the government. "There had been some encouragement in this from the Government, which was, in fact, considering both Red Deer and St. Albert as a possible site for an additional university" (West, 1982, p. 117). The Government was concerned with the continuing growth and expansion of the University of Alberta and felt "that such a large university, particularly one increasingly preoccupied with graduate programs was not the ideal university for freshmen" (p. 77).

The University of Alberta response to increased provision of university education at the colleges is particularly intriguing.

> If we were going to open up [second and third year courses] to the junior colleges, why not let the colleges go all the way and let them give their own degrees? General Faculties Council had no objections whatever to more degree granting institutions. (Wyman as cited in Long, 1979, p. 209)

In considering its options, the government explored support of a church-sponsored university, middle level institutions "like the state colleges of California," and a fourth university (Byrne, 1977, p. 103).

> A precedent had been set regarding the "vertical mobility aspirations" of colleges, and the government was not anxious to see this precedent repeated... it was most anxious to clarify the relationships between universities and colleges by giving its major attention to the needs of the colleges themselves. (Campbell, 1977, 213-214)

The provincial government eventually opted for an undergraduate university, focusing on teaching, and "providing some overdue competition for the University of Alberta" by its location in the St. Albert area (Robert Clark, 1981 cited in West, 1982, p. 78).

Summary of the 1960-1970 Period of Development

This description of the development of the postsecondary education in Alberta between 1960 and 1970, and the responses of regional communities, universities, and the Government demonstrates the intensity of the controversy over regional access to degree granting programs.

Gordon Mowat (personal communication, November 23, 1988) describes his view of this period as one in which

> the Government initially responded to the demands of the populace, while attempting to accommodate the demands of the University of Alberta. Concern that the continuing public demands would result in uncontrolled expansion and duplication led the government to develop a position and philosophy about postsecondary development which focused strongly on control of university education and degree granting capability, and on promotion of non-university education. The events in the 1965 - 69 period, and the responses of government clearly exemplify the imposition of government will on the system.

Initially, the recommendation to establish separate universities in districts where they were seen as required was implemented through the Universities Act of 1966. The Government chose, however, not to implement Stewart's recommendation that the University of Lethbridge be initially established as a branch of the University of Calgary, choosing instead to expand the University Section of the Lethbridge Junior College in order to form the new university. It is hard to determine what influenced this aspect of the Government's decision making -- local pressure or government policy. The effect, however, was to heighten the public perception that it was possible to create further universities within Alberta. This perception was further heightened by the Government decision to create a fourth university, based primarily on concerns with the size of the

University of Alberta. The apparent support of the University of Alberta for further degree granting institutions, and the reluctance of this university to develop transfer agreements with the colleges, intensified the need for the government to develop clear policies as to further system growth.

Control and Coordination of the Postsecondary System, 1970 - 1980.

The 1969 College Act implemented the proposals of the Board of Post-Secondary Education, retitling the junior colleges as Public Colleges, and establishing these colleges as autonomous institutions. In addition, the Alberta Colleges Commission was established to coordinate and regulate colleges and their programs. University affiliation arrangements were no longer a requirement for the public colleges.

The Colleges Commission emphasized that the role of the public colleges was to offer "instructional programs other than university-transfer, and provide services to clientele other than those who wish to attend universities" (Colleges Commission, 1970, p. 17). The creation of a new college in Edmonton, Grant MacEwan Community College reflected the new mandate for public colleges. The mandate of this college was to meet the educational needs of the Edmonton area populace which were not served by the existing university, technical institute or vocational center. Campuses were established in several sites throughout the city to increase access to the college programs and services. The college developed extensive academic upgrading, occupational, career, community-based, and continuing education programs.

Provision of university education continued to be a provincial issue. The 1970 Policy Statement of the Minister of Education exemplifies the continuing controversy as applied to the universities: "the University of Lethbridge and the proposed University in St. Albert should meet regional needs, rather than trying to imitate the universities in Edmonton and Calgary" (as cited in Berghofer & Vladicka, p. 37). The fourth university, named

Athabasca University, began academic and physical planning in 1979 to develop a university

> which emphasized individual study, a modular organizational structure which provided for close faculty-student contacts, innovative instructional methods, and the use of new educational technologies. (Berghofer & Vladicka, 1980, p. 36)

Planning for this new university was held in abeyance when a new provincial government was elected in 1971. One of the first acts of this government was to abolish the Universities Commission and the Colleges Commission, and form the Department of Advanced Education to assume responsibility for all sectors of postsecondary education.

> The idea of commissions did not fit into the Conservative educational philosophy. The demand for education had mushroomed in Alberta. Enrollments in institutions had risen rapidly, and the costs of programs had rapidly escalated. There was general concern in the business community and among the politicians who came to power that postsecondary education had to be controlled. The shift from the commission form of administration to a Department of Advanced Education was not an indication that the commissions had failed, but, rather, that the provincial government demanded more direct control. (Mowat, 1988, pp. 67-68)

The nineteen-seventies was a decade of increasing government involvement in coordination of postsecondary education; it was also was a decade of continued decentralization and expansion. All institutions expanded their enrollment capacity and the variety of programs offered. New public community colleges were created in the latter half of the decade in Fort McMurray and Lloydminster, with mandates to provide postsecondary education specifically related to the industrial, agricultural, vocational, and technical educational needs of the region.

The Public Colleges

The newly elected government also changed the funding system to provide direct funding for non-university programming. An increasing demand for para-professional and occupational programs by the public, and the availability of funding for such programs, resulted in the public colleges providing a wider range of non-university programs. University-transfer programs did remain a major part of public colleges in regions outside the major centers and in all private colleges.

> Considerable dissension arose between those who supported the comprehensive orientation and those who had hoped their college would develop into a degree-granting institution. (Berghofer & Vladicka, 1980, p. 35)

These colleges continued to pursue transfer arrangements and "on-site" senior courses from the major universities to extend the university-level programming (both undergraduate and graduate) to individuals in the college region (Kun, 1983, p. 34).

The Universities

The planning for Athabasca University had been put on hold with the election of the new government. In 1972, faced with growing enrollments and rapid expansion of the existing universities which was creating inordinate pressures on these institutions, the government re-established approval for Athabasca University, as "an undergraduate arts and science facility which utilizes new educational methods and technologies in adult education" (Berghofer & Vladicka, 1980, p. 36). The university accepted its first students in 1973, with a mandate of open admission, that is, no specified admission requirements to all individuals over the age of eighteen. Athabasca University created a unique role in Alberta university education by providing undergraduate education in

> liberal and applied studies through self-study instructional materials, the provision of lecture courses in smaller centers; and the use of various forms of educational technology to provide distance delivery of the educational experience. (Council on Admissions and Transfer, 1988, p. 6)

Athabasca offers baccalaureate degree programs in General Studies, Administration, and Arts, and University certificate programs in administration and public administration.

Problems With College-University Transfer

Transfer arrangements and agreements between the colleges and universities became very contentious issues, particularly following passage of the Colleges Act. Universities were reluctant to reduce their influence over the college programs; the colleges were adamant that continued university control was unacceptable. In 1968 and 1969 (just prior to this board being discontinued), the Provincial Board of Post-Secondary Education attempted to reach agreement with the Universities' Coordinating Council that colleges could determine the details of their university-transfer courses. Universities could determine the level of advanced standing to be granted. No agreement could be reached (Mowat, 1974, p. 142).

Alberta Council on Admissions and Transfer

In 1974, the Council on Admissions and Transfer was established at the request of the postsecondary institutions, as an independent body reporting to the Minister of Advanced Education. The Council is responsible for developing policies, guidelines, and procedures designed to facilitate transfer arrangements among postsecondary institutions and for implementation of these policies through monitoring, mediation, and research.

> The Council has a continuing responsibility for facilitating improvement in communications and working relationships among institutions regarding the admission of transfer students and the award of transfer credit. The basic

> objective of the Council is the enlargement of educational opportunities for students. (Alberta Council on Admissions and Transfer, 1988, p. 1)

As the composition and responsibilities of the Council expanded to include all sectors of the postsecondary system, the ease with which students could obtain transfer between institutions was greatly increased, and transfer arrangements and changes in these arrangements greatly facilitated.

The Private Colleges

The private colleges, however, remained dissatisfied with the affiliation arrangements required for transfer provision. These colleges perceived the specific needs of their constituencies were not being met by the public postsecondary educational system, and were frustrated by the lack of attention to their perceived need to become degree granting institutions. Several of these institutions began seeking affiliation with American universities which would grant degrees based on work completed at the private colleges (Obradovic, 1986, p. 160).

Change in Public Perceptions of Postsecondary Education

In the late nineteen-seventies, a broadly based social reaction and disenchantment with education emerged (Fleming, 1980, p. 105). Overall, the economies of industrialized countries experienced a downturn, costs for educational services steadily increased, and a shrinking labor market for postsecondary education graduates developed. A belief that expenditure for educational services is not justifiable in terms of social betterment or investment in human capital became evident. In Alberta, the oil boom was at its height, and a great need existed for technically trained workers, and professionals in such fields as engineering. University enrollments in general stayed the same or dropped as individuals easily found work without such education. Enrollments in occupation-related programs in the public colleges dramatically increased. However, the importance of postsecondary education in research, development of skilled and professional manpower, and development of individuals to meet the needs of a changing society in the future continued to be viewed as significant by the Government of Alberta (Alberta Advanced Education, 1985, p. 3).

1980 - 1988

Change in the Role of the Private Colleges

By 1978, Camrose Lutheran College, Canadian Union College (Lacombe), Concordia College (Edmonton), and King's College (Edmonton) had established affiliation agreements with the University of Alberta which allowed them to offer the first two years of baccalaureate degree programming in the arts and sciences. Canadian Union College initiated a proposal to become a degree-granting institution offering baccalaureate degrees in arts, science, business administration, education, and nursing, as well as in religion and theology. Two year pre-professional programs in medicine, dentistry, veterinary medicine, optometry and engineering were proposed for approval (Obradovic, 1986, p. 162). This proposal was followed by similar proposals for degree granting status by the other three private colleges.

A private member's bill was introduced in the Alberta Legislature by Dr. John Walker (representing MacLeod constituency) to allow Alberta colleges to grant degrees. This legislation called for colleges to "present their academic programs for approval by an academic peer review committee and subsequently by the provincial cabinet" (Edmonton Journal, November 3, 1978, B2). The proposed legislation was particularly aimed at the private colleges but did not exclude the public colleges. Although this private members' bill was defeated, an amendment to the Universities Act was proposed and legislation introduced in 1980 by the Minister of Advanced Education, to extend affiliation agreements between the private colleges and the university to include third and fourth year university courses. The resulting baccalaureate degree would be granted by the university to students who successfully completed the university-equivalent courses in the affiliated private college.

By 1981, it was apparent that this affiliation option was unworkable in the Alberta context, as no cooperative agreements could be established between the institutions (Berghofer & Vladicka, 1981, p. 60). Based on a recommendation of the Universities' Coordinating Council, an amendment to the Universities Act in 1984 established the Private Colleges Accreditation Board. This Board was granted the authority to approve and recommend to the Minister degree programs to be offered autonomously by private colleges. This amendment, although initially supported by the University of Alberta, was opposed following its initial reading in the legislature by the four universities in the province, and particularly by the University of Alberta. The concern was "that five public members would be appointed to the accreditation board empowered to decide which college programs would be allowed to grant degrees -- a right now reserved to universities" (Cashman, April 30,1983). The original recommendation had been for only two public members, with four members each from the college and university sectors. The universities believed that "academic decisions must be made primarily by academics"(ibid.). The private colleges pressed for the amendment to the Universities Act to be implemented, stating "the accreditation board will be able to make acceptable decisions ... the Alberta government does represent all the province. It is very appropriate that the Government did expand the representation" (Cashman, May 6, 1983). The amendment was passed as written in 1983.

By 1988, three of the four private colleges had received permission to grant Bachelor of Arts and Bachelor of Science degrees. Canadian Union College is still pursuing approval. The approved colleges are now preparing proposals to extend their programs to include education, the paraprofessions and pre-professional programs. As well, several other religiously-affiliated institutions in the province are attempting to achieve legislated status, in order to gain degree granting authority (G. Mowat, personal communication, February 22, 1988).

Formal requests by Grande Prairie Regional College and Medicine Hat College for "authority to grant university undergraduate degrees in selected areas of study" (Gilmour, November 13, 1984) were an immediate response to the Amendment to the Universities Act approving degree granting capability for the private colleges. Such authority was requested by these public colleges in programs attracting the highest interest and enrollments at the colleges, specifically in the subject areas of arts, sciences and education. The rationale for this request was couched in terms of the need to reduce the financial burden on students and their families by allowing them to remain at home, and the need for increased opportunity for people in the region to complete their education within their home area (ibid.). Red Deer College as well indicated its interest in obtaining degree granting authority.

> The long range goal of this college is to provide students with the opportunity to complete degree programs at Red Deer College. By 1990, [Red Deer College] will have received government approval to either grant degrees in a limited number of programs, or at least to broker the third and fourth years of some degree programs. (Institutional Long Range Plan of Red Deer College, 1982, p. 20)

These public colleges believed that because they held the same affiliation agreements with the universities that the private colleges held, an amendment to the Public Colleges Act to award degree granting authority was a consistent extension of government policy:

> Since the government has made this response to long-standing requests from several private colleges, there might be similar consideration given for public colleges which demonstrate capability to meet established academic standards. (Gataint, 1984, p. 71)

Government of Alberta Policy Focus for Postsecondary Education

In *Strategic Planning for Post-Secondary Education* (Alberta Advanced Education, 1985, p. 3), the government outlines the need to ensure that the post-secondary educational system can adapt to changing social and economic conditions. The government view is that system re-orientation, collaboration and cooperation is required, and this requires government - directed strategic planning (p. 8). The policy focus is defined as increasing the cost-effectiveness of the system through centralizing programming, reallocating resources and programs in the system, developing a comprehensive distance education service to enhance access, and increasing the role of the government in system coordination and control. The document emphasizes the intent of the government of continuing to respond to local, institutional, and public interests. Emphasis is also placed on the need for comprehensive involvement of a wide range of stakeholder groups, and mechanisms which allow rapid response to constantly changing conditions (p. 60).

The University of Alberta Study on Delivery of University Education

The *Strategic Planning for Post-Secondary Education* document, and continuing regional community concerns expressed to the University of Alberta Senate regarding the unmet needs for university education in Alberta, provided impetus for a study on the provision of university education in the province. The University of Alberta Senate appointed a task force in 1985-86 to conduct a study to assess options for delivery of university education in Alberta. The study involved assessment of the perspectives of high school, college, and university students, Deans and Department Chairpersons of the University of Alberta, and public and private college administrators in Northern Alberta.

The Senate Task Force report was released in 1986 by the University of Alberta. The student profile revealed that the major factors affecting postsecondary attendance were the location and time of course offerings, and the corresponding impact of personal responsibilities. Although these factors were particularly true for adult and married students, sixty percent of students below the age of twenty-four would choose to remain in their own community if courses were available. Eighty-seven percent of adults indicated this preference. Although much of the literature discussing factors affecting postsecondary attendance suggest that restriction of course offerings to the traditional academic year is a factor in non-attendance, the majority of all student respondents in this study preferred a September to June academic year (University of Alberta, 1986, pp. 30-35).

The majority of Deans and Department Chairpersons favored the present system of delivery of university programs. All disciplines requiring laboratory or clinical facilities felt the traditional "on-campus" mode of delivery was essential. Limited support was found for further expansion of off-campus credit courses through distance education technology. The majority expressed satisfaction with the present residency requirements, and the provision of alternative program delivery through Special Sessions offerings on campus. Maintaining personal contact between the instructor and students was seen as an essential element in effective university-level teaching; the human and financial costs associated with maintaining this contact in off-campus courses was the major rationale underlying non-support of off-campus credit course provision (p. 36).

Deans and Chairpersons also indicated strong opposition to the alternatives of expanding the role of public and private colleges through increasing course transferability to the University of Alberta beyond the second year of programming, or through colleges offering their own degrees, or through establishment of satellite campuses of the University of Alberta. Reasons given for such opposition included difficulties in guaranteeing maintenance of high standards due to a perceived lack of both human and physical resources in the colleges, and a perception that expansion in the colleges would escalate postsecondary educational system costs (p. 37).

All college respondents (six public and three private) felt that the needs for university-level programming in Alberta were not being met by the present system. The greatest need seen was to increase the flexibility in location, time and methods of university-level programming. All respondents indicated that such flexibility could be obtained through a combination of the following:

1. expansion of off-campus credit courses,
2. expansion of university-level programming in colleges to that of complete degree programs, that is, through addition of the third and fourth year of present programs,
3. elimination of residency requirements,
4. expansion of the first and second year university-transfer program offerings to increase the variety of programs (disciplines) offered, and/or
5. increasing the availability of distance education.

Two colleges expressed a strong commitment to colleges offering their own degrees. None of the colleges surveyed supported establishment of satellite campuses by the University of Alberta.

The differences in the expressed needs of the student population, the perceptions of the University of Alberta, and the perceptions of the public and private colleges as to appropriate ways to meet these needs are apparent.

Proposed Changes in the Role of the University of Alberta

The need to consider further decentralization of university programming has been heightened by the implications of the discussion documents released by the University of Alberta. In *The Next Decade and Beyond: A Plan for the Future* (1986), and *Draft Policies: The Next Decade and Beyond* (1987) the University states its intent to refocus its resources on expanding graduate level, senior undergraduate, and professional programming, while limiting its full-time enrollment in the regular academic year to 25,000. In order to effect this development, the University has raised the academic standing required for entrance into the undergraduate programs offered by the University, and instituted further "quotas" for enrollment in various faculties in order to effect a maximum enrollment of 20,000 undergraduates by 1996. This action was proposed to allow expansion of enrollment in the graduate programs to twenty percent (5000 students registered in regular term credit courses). A significant recommendation is that initial undergraduate education should be gradually transferred to other post-secondary institutions in the province (1986, p. 21). In actual fact, first and second year enrollments dropped at the university in 1988, and third and fourth year enrollments increased somewhat.

The planning documents also make it explicit, however, that the University perceives a system of "transfer" being continued between the non-university and university sectors, and that "if the University of Alberta is to award a degree, in the end it must be able to say what work taken elsewhere will be credited towards that University of Alberta degree" (1987, p. 29). In practice, this would mean "that more attention would have to be given to the joint development of transfer programs by several institutions" in order for them to assume the major part of junior-level undergraduate teaching (1986, p. 16). It is important to note, however, that this recommendation does not apply to undergraduate professional programs, as provision of professional graduates is seen as a major priority of the University (p. 22).

Proposed Changes in the Role of the University of Calgary

In 1980, the University of Calgary released the Report of the University of Calgary Program Review Committee entitled *The Shrinking Maze*. This report outlines in extensive detail proposed plans for the University. The role of the University is defined as: "initiating and maintaining programs in the fundamental disciplines, and the professions; preparing students for advanced study; and developing a strong Faculty of Graduate Studies" (pp. 29,30). In addition, the University's role in "a range of research activities," and the need to extend and strengthen that role is emphasized.

> The primary role of a university is teaching, that point is not being questioned here. But a close secondary role, so close in fact that the two go hand in hand, is research. Extending knowledge while it is being taught, teaching how to extend knowledge -- these are the unique functions of universities ... While different disciplines within the University of Calgary have developed at different rates, an overall problem is that a breadth of teaching has developed without a corresponding depth of research. (p. 272)

However, this report also emphasizes that "it would be impractical and shortsighted to ignore the quality of the institution's general undergraduate degree programs" (p. 277), and that fiscal decisions made within the university must recognize its commitment to these programs, as well as enhance the graduate programs and research activities.

In 1988, the Board of Governors of the University of Calgary announced adoption of a policy "to use a priority registration procedure to limit enrollment in undergraduate programs to the level of the previous year" (Council on Admissions and Transfer Annual Report, 1988, p. 4).

Change in the Role of Grant MacEwan Community College

Grant MacEwan Community College obtained formal approval and funding for a two-year university-transfer program in 1988. This approval was seen as a necessity due to the University of Alberta's plans to decrease undergraduate enrollment (Elliott, February 24, 1988). Prior to this, Grant MacEwan maintained only individual course transfer arrangements with the University of Alberta. In addition to the change of role for Grant

MacEwan College, all colleges (both public and private) received additional funding to expand their university-transfer enrollment capacity in September 1988.

Provision of University Programs by Out-of-Province Institutions

One Canadian university and two universities from the United States are actively providing university programs in Alberta colleges. Northland Open University (the institution funded and approved by the Canadian federal government) is offering a distance education Bachelor of Commerce degree in several colleges. Golden State University is offering programs in Ft. McMurray in management at both the Bachelor's and Master's level. Gonzaga University is presently offering a Master's of Education degree through Keyano College and Red Deer College, and has approached several other colleges regarding similar arrangements (Terry Moore, personal communication,September 22, 1988). All of these universities have very high tuition fees, but have had sufficient enrollments in these programs to continue offering them. Concerns with the academic standards for admission and graduation in these programs have been expressed by Alberta postsecondary educators.

There is a growing fear that inaction on increasing the provision of university education in non-urban areas will result in a massive influx of American-based programs.

> Canadians are very, very leery of U.S. programs -- there is a general perception that academic standards underlie the failure of the American educational system. At the same time, there is also a perception that too much concern for academic standards has limited access beyond a reasonable point. (Terry Moore, personal communication, September 22, 1988)

Growing Advocacy for Public College Degree Granting Capability

In November 1988, Advanced Education Minister David Russell stated that "allowing Alberta's community colleges to grant degrees could be the wave of the future" (Lau, November 26, 1988). In his discussion, Mr. Russell stated he perceives a growing necessity to take education to the people, rather than requiring people to come to a centralized institution; he also reflected on the success of Athabasca University in providing degree-level education both on a distance basis and on an on-site basis at Keyano College and emphasized the importance of public opinion on this issue.

Mr. Russell's responses reflect a growing trend in Alberta. Keyano College has entered into an agreement with Athabasca University to offer two years of undergraduate programming leading to a baccalaureate degree in business, general studies, and arts. This agreement is known as the Capstone project. In early 1989, Athabasca University announced that similar programs would be offered at Grande Prairie Regional College and Medicine Hat College.

Red Deer College has conducted a regional survey to establish whether or not that college should grant degrees; and, given the high level of support established by the survey, is proceeding with a formal proposal to gain degree granting authority for that college. In addition, Red Deer College is seeking approval for a cooperative degree program in nursing (personal communication, M. Wood, Dean, Faculty of Nursing, University of Alberta, April 22, 1988). This program is an application of the original extended affiliation proposal recommended to the private colleges in the early nineteen-eighties.

Medicine Hat College is exploring arrangements with all four provincial universities to offer complete undergraduate degree programs at that college (Strickland, December 3, 1988). Although presently aimed at having the universities offer third and fourth year at the college, that arrangement is seen "as a first step in moving toward granting our own degree (Orval Shantz, Chairman of the Board, Medicine Hat College, as cited in Strickland). Strong community support is evident for the plans of Medicine Hat College.

Mount Royal College initiated a feasibility study in 1989 as to whether or not this college should grant degrees (MRC News, October 12, 1989). The study is seen as necessary for long range planning, and as a response to the general demand for higher educational requirements in the work force. Additional pressures fostering degree-granting aspirations for the college are the increased admission requirements of Alberta universities, and the recent decision to extend degree granting authority to other public colleges in Canada, particularly the British Columbia colleges. However, the Acting President also identifies the negative factors affecting this issue: the opposition to such extension by the Minister of Advanced Education and the Universities' Coordinating Council; and the impact of such a change on the resources of the college, and on its current roles and mandates. The intent of current planning is to assess if degree programs can be added to the College mandate without changing the current programs offered, not to convert the college into a university.

THE CURRENT ENVIRONMENT IN ALBERTA

In April 1989, Mr. John Gogo was appointed as the new Minister of Advanced Education. In an interview reported in the Alberta Advanced Education Newsletter (September 1989), Mr. Gogo emphasized that he sees his role as ensuring that "we offer every opportunity to adult Albertans who have the ability and desire to pursue higher education" (p. 1). One of the key issues in postsecondary education seen by Mr. Gogo is accessibility to undergraduate university programs, and the need to ensure that there are adequate spaces to meet the demands by Albertans. Secondly, he identified the issue of degree granting by public colleges:

> how do I resolve the problem for those who want to obtain a degree and cannot get into university because of the quota system imposed by the two major universities? This matter is obviously going to have to be addressed.

The question of accessibility is seen by Mr. Gogo as a recent phenomenon, which finds expression in terms of enrollment pressures at the undergraduate level, including the public colleges with university-transfer programs, and at the University of Lethbridge as well as at the two major universities. With the expansion of Lakeland College, he believes that adequate enrollment spaces will exist for the next year. Any decision regarding degree granting for the public colleges is unlikely to be reached before 1991 (Mabell, September 16, 1989). Mr. Gogo sees a necessity to examine the impact on students and colleges if degree granting were extended, to ensure that degrees maintain credibility with the universities, and to ensure that the public college focus does not move away from career training.

The third priority of Mr. Gogo is to "see more people reach new heights in research, so Alberta's institutions could be world renowned" (p. 6). Funding priorities are these: replacing obsolete equipment in the postsecondary institutions; funding for undergraduate programs in business at the three traditional universities; increased funding for private colleges, with a goal of funding these colleges at seventy-five percent of operating grants to public colleges; funding of a Bachelor of Education program for native students; and funding to expand and enhance child care worker programs in the postsecondary institutions.

Current and Projected University Program Enrollments

Full time student enrollment in university-level programs in Alberta, defined as students enrolled at the University of Alberta, University of Calgary, University of Lethbridge, degree granting private colleges, and two year university-transfer programs at the public colleges, reached an all time high of approximately 50,000 students in 1987-88 (Alberta Advanced Education, 1988, p. 4). In 1981, the student enrollment was approximately 35,000. This level of demand for university programs is projected to remain relatively constant until approximately the year 2000, and then to increase to between 58,000 and 64,500 students eligible for enrollment between the year 2000 and 2008 (pp. 9, 10). The demand for enrollment, stated in terms of shifted participation rates, is estimated at 170 per 1000 individuals in the eighteen to twenty - four year old population in 1988 - 89, and projected to be 200 per 1000 of this population by 1993. In 1981, the shifted participation rate was approximately 140 per 1000 population of eighteen to twenty-four year olds (pp. 3-5). Shifted participation rates involves "shifting the population curve to the right by three years, reflecting the maximal influence on enrollment of population change" (p. 4).

A graphic description of university capacity and admission demand for full time study in Alberta, as adapted from information provided by the Alberta Department of Advanced Education (1988) is presented as Figure 4. It is evident that the present system capacity for full-time university admission becomes increasingly inadequate after 1988 in terms of meeting the demand for such admission.

System Capability to Meet Enrollment Demand

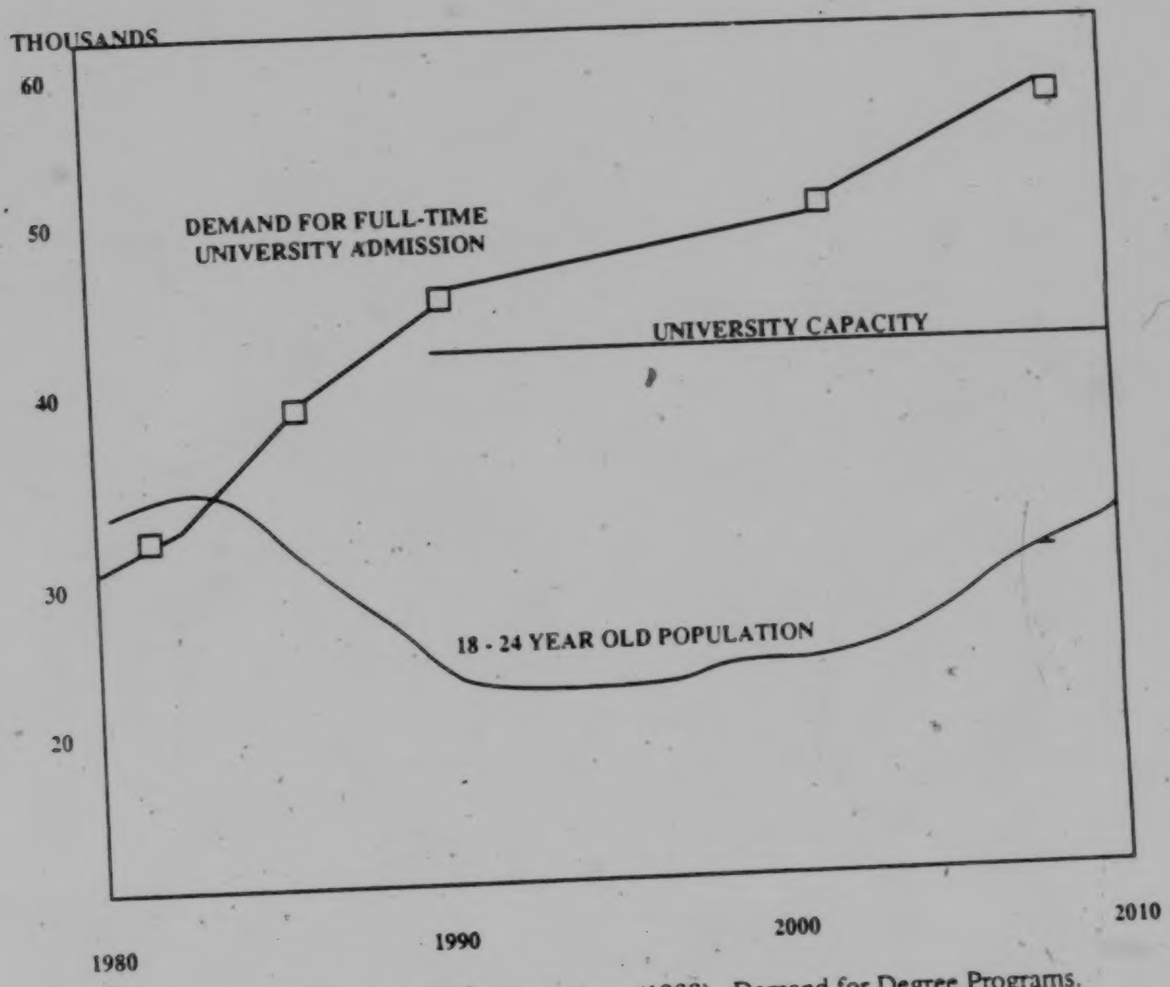
Full-time fall session day study is the prime source of pressure on an institution's capacity, as well as being less amenable than part-time study to accommodation of increased enrollments through alternate delivery systems (Alberta Advanced Education, 1988, p. 10). Universities presently accommodate approximately ninety percent of university-level full-time enrollments (p. 12), although recent policy and administrative changes implemented by the Universities of Alberta and Calgary have deflected some of the traditional university enrollment towards the colleges.

The effect of the seventy percent entrance requirement implemented by the University of Alberta in 1988 is projected by the Department of Advanced Education to decrease university enrollment by 1500 students over the next three years (p. 14). There is a definite shortage of course sections in popular university programs, especially in third and fourth year, which contributes to the placement shortage (p. 16). The phasing out of three year degrees at the University of Alberta will increase the demand for fourth year places by 700 students. The University of Alberta undergraduate enrollment fell by 850 students in 1987 -88. This trend, however, did not continue.

In 1987, the three traditional universities in Alberta (University of Alberta, University of Calgary, and University of Lethbridge) enrolled a total of 4, 270 transfer students. Forty-two percent of those students transferred from the Alberta public colleges. This level of transfer reflects a 139 percent increase from 1979, when 1, 788 students in total transferred to these universities (Alberta Council on Admissions and Transfer, pp. 6,7).

In September of 1989, the University of Alberta experienced an increase in enrollments in some undergraduate programs, rather than the expected decrease. Overall, enrollments increased by 2.4 percent, that is, by approximately 700 students. The Faculty of Education enrollments increased 12. 7 percent; the Faculty of Science by 3.7%; and most other faculty enrollments increased by less than 3 percent. The Faculty of Arts enrollments decreased by 3.9 percent; four other faculties experienced decreases in

UNIVERSITY CAPACITY AND DEMAND FOR ADMISSION



Adapted from Alberta Advanced Education, (1988). Demand for Degree Programs.

Figure 4

enrollment (Folio, November 2, 1989, p. 1). The Deans of the Faculties of Arts and Science have proposed that quotas be established in these faculties. To meet the enrollment pressures particularly in the third and fourth years of these programs, class size limits have been "tripled to ensure students can be accommodated" (Aikenhead and Boehm, 1989, A1). Dr. Paul Davenport, the newly appointed President of the University, states that "a quota on new students is a last choice. We would take no action that would significantly restrain enrollment without full discussion with our sister institutions and the Minister of Advanced Education" (as cited in Danylchuk, 1989, p. B2). Options outlined by the President include increased government funding, a trimester system, or creation of a new university. The major problem seen by the President in the university system is that

> increases in undergraduate student numbers over the past decade have outpaced the increase in budget required for additional academic staff ... The result of these trends has been a steadily growing class size in many areas of instruction, and a decline in actual intellectual contact between undergraduates and regular full-time staff.
>
> This imbalance has been particularly acute in the Faculties of Arts and Science ... [who] are currently considering quota proposals to achieve a better balance between student numbers and faculty positions, and thereby protect the quality of their undergraduate programs. (Folio, 1989, p.7)

A more desirable option than quotas is identified as increased funding, which would allow the University to increase enrollments, and ensure accessibility to high-quality university education in the province. Furthermore, the President believes that doctoral programs at the university are essential to maintaining accessibility to undergraduate programs, both for their direct teaching assistance provided by graduate students in such programs at the university, and the increased numbers of qualified individuals available for recruitment for university programs throughout the province, including the programs offered by the colleges.

THE REPRESENTATIVE PUBLIC COLLEGES: DEVELOPMENT AND CURRENT UNIVERSITY PROGRAM PROVISION

This section of the chapter provides a brief description of the development, current roles and mandates of each public college whose representatives participated in the study. Information on admission requirements for university-transfer programs, and current enrollment statistics for these programs are provided for each institution in Table 1.

Grande Prairie Regional College

Grande Prairie Junior College was established in 1966, offering university course work exclusively. Between 1967 and 1969, the college began to diversify its programming to business education and administration, academic upgrading, occupational and para-professional programs. In 1980 and 1984, capital funding was received to expand facilities, the 1984 funding specifically to expand facilities for apprenticeship and technology programs. In 1987 capital funding for major building expansion of the campus was approved ($30.5 million), with construction to be completed in 1991.

The calendar indicates that, due to budgetary cutbacks, the choice of university-transfer programs at the college has been restricted in 1988-89 from the variety of courses offered in previous years. Enrollment has dropped in these programs from approximately 500 full time students enrolled in 1985-86 to approximately 400 students in 1987-88. This decrease in enrollment is attributed by the President of the college to the reduction in the number of options available to students, and therefore the reduction of interest by students in these programs, especially those in the eighteen to twenty-four age range who are mobile and can consider options elsewhere.

Although the proportion of adult students is steadily increasing in the university-transfer programs, the President states that the curent enrollments reflect proportionately more of the eighteen to twenty-four year old age group of students. The expectation is that adult population in the university-transfer programs will continue to increase.

Grant MacEwan Community College

Grant MacEwan Community College was established in 1970 to provide non-university programs only. The mandate of the college was to meet the educational needs of the Edmonton area populace which were not served by the existing university, technical institute or vocational center. Campuses were established in several sites throughout the city to increase access to the college programs and services. The college developed extensive academic upgrading, occupational, career, community-based education, and continuing education programs.

In 1988, the College received capital and operating funds to create two year university-transfer programs. Grant MacEwan Community College had been pursuing approval for such programs since 1981 based on a perception that there was a community need for additional university-level programming beyond that provided by the University of Alberta, described by the President of the College as the "increasing need to provide a bridge between high school and the university in order to increase student success rates." The "bridge" is seen to be provided through the student - centered, teaching orientation of the college, and the ability of the college to provide more individualized instruction due to its smaller class sizes.

The direct result of establishment of the university-transfer programs was a fifty percent increase in university-transfer faculty, and an increase in university-transfer enrollments from approximately six percent of full time-time students enrolled in the college to approximately ten percent of the full-time student enrollment in 1988. In the fall of 1988, the College received approval and funding to create a major downtown campus in Edmonton, which has fueled speculation as to whether the university-level education offered by this college will be further expanded. The College President states that the new campus will allow consolidation and expansion of the comprehensive college programs and services, not further expansion of university-transfer to third and fourth year undergraduate levels of education. Overall enrollment capacity of the college is planned to expand to 6500 places in 1992 (from the present 4500 places).

Applications for and enrollments in the university-transfer programs have increased greatly. The college has approximately 450 students currently enrolled in the university-transfer programs, compared to approximately 200 students enrolled in 1987. The President states that the university-transfer programs include a high proportion of students aged eighteen to twenty-four. Applications for these programs exceed available places by a ratio of five to one.

Keyano College

In 1975, the Alberta Vocational Center - Fort McMurray was converted to Keyano College. The programs offered by the AVC were expanded to include a wider range of technological, business and general education programs. The original mandate of the college was to offer a broad range of programs designed to meet the industrial needs of the Fort McMurray area, and to provide some university-level programs.

In 1978, the college which had been a provincially governed educational institution became a publicly controlled institution through the creation of a Board of Governors. Concurrent with this transfer, the college received major capital development funding for expansion of the college. Development occurred in all program areas, resulting in comprehensive educational services being provided.

University transfer enrollments are described by the President of the college as "dramatically increased." Enrollments have grown from 30 full time students enrolled in university-transfer programs in 1981 to 145 full time students enrolled in 1987-88. Approximately fifty percent of the students enrolled in the college (and in university-transfer programs) are over the age of 25. The average age of full time credit students is 27.3 years; for part-time students the average age is thirty years.

Medicine Hat College

Medicine Hat Junior College was established in 1965, under the supervision of the University of Calgary. The initial programs offered concentrated exclusively on university-transfer. Between 1967 and 1969, the College began to offer courses in business, education, administration, and in academic upgrading. By 1969, non-university-transfer programs, particularly in the health-related fields, had been added to the programs offered. University transfer remained the major focus of the college. In 1971, the permanent campus for the college was completed. In 1979, a satellite campus was established at Brooks. This campus offers primarily technical and vocational courses, but does offer a group of core courses each semester in university-transfer programs. The college added apprenticeship programs to its comprehensive mandate in 1984.

University transfer enrollments have increased over the past few years from 345 full time students in 1981 to 650 full time students in 1987-88. The student enrollment includes a mix of "traditional-age" and mature students, with the number of mature students believed to be increasing steadily. University transfer programs enrol slightly higher proportions of traditional students than other college programs, but the expectation is the mature student numbers will continue to increase in the university-transfer programs.

Red Deer College

Red Deer Junior College was established in 1963, offering first year university-transfer programs exclusively. Following the opening of the permanent campus in 1967, the first non-university career diploma programs in Nursing and Business were offered as part of the college programs. In 1969, adult academic upgrading programs were added, and the name of the college was changed to Red Deer College. In 1970, second year university-transfer programs, and a broad selection of diploma career programs were offered through the college. In 1972, the government dissolved the college board and appointed an interim administrator, partly due to dissension within the college as to whether the college should offer a diversity of non-university programs and university-transfer programs, or offer university programs exclusively.

In 1973, a new Board of Governors and a new President were appointed; the college became stabilized as a two year institution offering university-transfer, adult upgrading, and career-oriented programs. In 1979, apprenticeship programs were added to the college offerings. In 1988-89, the college continues to provide the same mix of programming provided in 1980.

In 1987-88, approximately 900 full time students were enrolled in university-transfer programs, out of a total college full time enrollment of 4440; enrollments have increased significantly since that date. 12,000 applications were received in 1987 for the available places throughout the college. Students enrolled in university-transfer programs represent a mix of mature and traditionally aged students, with mature student enrollment increasing. The median age range of the university-transfer cohort in 1986 was 20 - 22 years (Red Deer College Annual Report 1986).

Table 1

College University Transfer Programs; Admission Requirements and Enrollments

	Grande Prairie Regional College	Grant MacEwan Community College
Transfer Programs Offered	Programs may be 1 or 2 academic years dependent on resource availability. Arts, Fine Arts, Music, Business Administration, Education, Nursing, Physical Education, Preprofessional: Medicine, Law, Dentistry.	2 Year Programs Arts Commerce Science
Admission Requirements	Specific requirements for courses & required grades may be established by individual programs. Quotas exist in all programs.	Specific requirements established by individual programs. Quotas exist in all programs.
Standard Admission	English 30 and 4 other academic Grade 12 subjects	English 30 plus 4 other academic Grade 12 subjects.
	Minimum course mark 50%	Minimum course mark 60%
	Overall average 60%	Overall Average 65%
Mature Students	Minimum age 18; out of school one year.	Minimum 18, out of school one year.
	English 30 plus 2 other academic Grade 12 subjects	3 Grade 12 academic subjects.
	Overall average 60%.	Overall average 65%.
	Additional courses may be required dependent on program.	
Enrollments in University-Transfer Programs (1988)	400 Applications exceed capacity	500 Applications exceed capacity

Table 1 Continued

Keyano College	Medicine Hat College	Red Deer College
2 Year Programs: Arts, Humanities Education Nursing ....Social Sciences ....Social Welfare One Year Programs Business Administration Engineering .... Home Economics .....Science	2 Year Programs: Arts, Humanities Business Administration Education Nursing Physical Education Pre-optometry, pre-veterinary medicine Preprofessional Medicine, Law, Dentistry ... Science ....Social Welfare One Year Programs Agriculture, Forestry Engineering Fine Arts .... Home Economics .....Science	2 Year Programs: Arts, Humanities Business Administration Education General Studies Nursing Physical Education Preprofessional Medicine, Law, Dentistry ... Science Social Sciences ....Social Welfare One Year Programs Agriculture, Forestry Engineering .....Home Economics
Specific requirements may be established by programs.	Specific requirements may be established by programs.	Requirements may be specified by program.
Quotas exist in some programs	Quotas exist in all programs.	Quotas exist in all programs.
English 30 plus 4 other academic grade 12 subjects Minimum course mark 50% Overall average 60%	All programs require 5 Grade 12 subjects. Overall average requirements vary: the majority require 65% Arts, Home Ec., Phys. Ed, Science : 70% average Pre-optometry/vet. med: 60%	English 30 plus 4 other Grade 12 academic subjects Minimum course mark 50% Overall average 60%
(Mature students): Minimum age 18, out of school 1 year. English 30 plus 2 other academic subjects. Overall average 60%	As for regular admission: college equivalent courses may replace specified grade 12 subjects	Specified by program
150	700	900
Able to accommodate qualified applicants.	Applications exceed capacity	Applications exceed capacity

UNIVERSITY ADMISSION REQUIREMENTS, CURRENT ENROLLMENTS, AND TRANSFER PROVISIONS

The universities in Alberta vary in their requirements for admission to undergraduate degree programs, but have very similar regulations governing transfer of courses for credit towards a degree. The most flexible requirements and regulations are those of Athabasca University. This can be attributed to the student population which is primarily over the age of twenty-five, and who complete coursework on a part-time basis.

Table 2 describes the admission requirements, transfer requirements, and 1988 undergraduate enrollment figures for each university.

Table 2
University Admission Requirements, Transfer Provisions and Enrollments

	Athabasca University	University of Alberta	University of Calgary	University of Lethbridge
Admission Requirements	Open admission if 18 years of age or older; Canadian resident	Quotas exist in all programs	Quotas exist in all programs	Quotas exist in some programs
Standard Admission		Five Grade 12 academic subjects. No course mark less than 50%. Overall average 70%	Five Grade 12 academic subjects No course mark less than 50%Overall average 60%	English 30 plus 4 other Grade 12 subjects. No course mark less than 50%Overall average 60%

Table 2 Continued

Mature Students		Over age 21; Resident of Alberta, Yukon Territories, Northwest Territories for one year.	Over age 21. English 30, interview, & scholastic aptitude & achievement tests.	19 years of age or older. Interview required, no subjects are specified.
		Three Grade 12 subjects, faculty variations in average required	Individual faculty may require additional courses.	
Transfer Provisions	Any postsecondary course appropriate to degree program with mark of 60%.	Maximum of 10 course credits. Marks required specified by faculty. Two semesters of university-transfer programs accepted as one year of degree program.	As for the University of Alberta	Minimum 2.00 GPA required in university-transfer program.
	Specific number of courses must be completed at AU	Two full years of coursework must normally be completed at UA.	Two full years of coursework must be completed at UC	Twenty courses must be completed at UL.
Undergrad. Enrollments (1988)	11,000 (part time)	22,000	16,000	3000

CHAPTER SUMMARY

Prior to 1945, university education in the province was provided solely by the University of Alberta. Any decentralization of such education, for example, to private colleges or school boards, could only occur with the approval of, and under strict control by, the University of Alberta. The government believed that the demand for such education could be satisfactorily met by this controlled decentralization, and by the extension programs offered by the University. The public, however, believed that greater regional social and economic benefits resulted from the presence of a university than from non-university institutions.

Following the Second World War, the economic needs for professional and technical workers, and the demand for social equality and equity in opportunity, resulted in the government recognizing that higher education was essential to provincial growth, and expansion of the provision of higher education was required. The government decentralized university education through creation of the University of Alberta at Calgary, and through authorizing creation of public junior colleges. The junior colleges were designated as institutions which were to provide university-transfer programs and career and technical programs under the control of the Department of Education. Control of university education was maintained by the University of Alberta through an affiliation requirement for junior colleges. The government also believed there was a major need to expand non-university education. The public saw the provision of university education as the first priority for program provision in the junior colleges. The University of Alberta encouraged this development, based on a belief that these programs could reduce the undergraduate enrollment pressure on the University. The junior college communities believed there was a distinct possibility that the junior colleges could be developed to degree granting institutions. This period between 1945 and 1960, then, marks the development of a distinct conflict between the governmental view of the need for both university and non-university postsecondary education to meet provincial needs, and the public view that the priority need was for university education.

Beginning in 1960, the "baby boom" began to affect the enrollments in all postsecondary institutions. Correspondingly, the demand for additional institutions, and for university education provision increased. The government remained very concerned that a significant need for non-university education was not being met in the province. The conflict about the appropriate roles and mandates of regional postsecondary institutions and the control of university education by the University of Alberta continued. The University of Calgary now offered undergraduate degrees in a wide range of fields. The junior colleges had continued to expand their university-transfer programs, but had done little in developing non-university programs. Some of the junior colleges began lobbying for conversion to university status, or authorization of degree granting capability.

In response, the government authorized the creation of the University of Calgary as an autonomous institution, and authorized the creation of the University of Lethbridge as an undergraduate university, to be based on the existing university-transfer section of the Lethbridge Junior College. These actions resulted in proposals for Red Deer Junior College to be developed as a university, and for an additional university to be created in the Edmonton area. An undergraduate university was approved for the St. Albert Region. The Colleges Act of 1969 changed the title of these colleges from junior college to public college, clarified the mandate of these colleges as primarily providing non-university education programs, and transferred administrative control of all college programs (including university-transfer) to the Colleges Commission. A community college which provided only non-university education was created in Edmonton. In summary, the nineteen-sixties was a decade in which the initial government response to public demands was creation of additional universities, followed by a government directive that public colleges were to provide non-university education as a priority, or exclusively; university-transfer was to be secondary.

In the nineteen-seventies, a new political party became the elected government, and began to establish a system of postsecondary education under direct government control. Such control was seen as necessary to limit the escalating costs and duplication of programs offered by the various postsecondary educational institutions. This change in policy was supported by the public, as the interest in and demand for university education had decreased. The government continued to emphasize that the role of the public colleges was to provide non-university education as a priority. However, university-transfer programs remained a major part of the courses offered by most public colleges and all private colleges. Transfer of credit between colleges offering university-transfer programs and the universities became a very contentious issue. The Council on Admissions and Transfer was created to facilitate transfer arrangements between the institutions. This effectively reduced the conflict between the public colleges and universities, and resulted in some decrease in pressure for extension of degree granting capability to the the public colleges. The private colleges and their supporters, however, continued to lobby for degree granting status, based on a belief that such status was necessary to meet the needs of their particular constituencies.

A significant downturn in the Alberta economy occurred in the early nineteen-eighties, and demand for enrollments in university education escalated, as individuals sought to increase their qualifications for jobs. The government response was to emphasize the need for the postsecondary educational system to adapt to the changing social and economic conditions, and increase its cost-effectiveness. System strategic planning was identified as a major need. In 1984, accredited private colleges were granted the right to seek approval of degree granting status. Three such colleges now grant undergraduate degrees in Arts and Science. Immediately following this approval for the private colleges, Grande Prairie Regional College, Medicine Hat College, and Red Deer College formally requested authority to grant undergraduate degrees, or approval to offer the third and fourth years of undergraduate degree programs. These requests were based on beliefs that there was a growing need to increase the availability of university education in the province, and particularly the availability of degree education in their home region, in part to reduce the financial burden on individuals and their families; and a belief that since the private colleges had been granted this authority, so might those colleges who had demonstrated academic credibility in university-transfer. Further expansion of university education by the colleges was strongly opposed by the universities, particularly the University of Alberta.

Long range planning documents published by the University of Alberta and the University of Calgary heightened the concern that undergraduate enrollment at these institutions would be further curtailed, and that the quality of undergraduate programs at these institutions might decline. A direct government response to these published plans (and the public reaction to these plans) was to approve provision of university-transfer programs at Grant MacEwan Community College, and expand enrollment capacity in the university-transfer programs offered in all other colleges. The public belief that access to university education is limited is also demonstrated by the growing enrollments in degree programs offered by out-of-province and out-of-country institutions, despite the very high tuition fees required by these programs. Concerns exist among postsecondary educators about the lack of control of standards and quality in these programs. Several of the public colleges have now entered into, or are attempting to develop, collaborative or capstone arrangements with the universities to increase the regional provision of degree programs.

Of the institutions represented in this study, three of the public colleges were initially established as junior colleges; the other two were established as community colleges, with a primary mandate for provision of non-university education. Two of the universities are full undergraduate and graduate institutions; the other two are primarily undergraduate institutions. Full time and part-time enrollments have increased significantly in all university education programs in the province. The rate of increase, and projections of continuing enrollment increases, raise questions as to the capability of the universities to accept the required numbers of transfer students. Admission requirements for university-transfer programs in the public colleges reflect the requirements of the regional university, or the requirements of the university offering the final years of a specific program. The exception to this is the colleges in the Edmonton region, which all require a sixty-percent high school average, rather than the seventy percent average required by the University of Alberta. All universities specify that approximately two years of course work must be completed at the university granting the degree. Transfer students are not required to present similar high school subjects or averages as students requesting entry into first year, but must have successfully completed college courses deemed applicable to the particular degree programs.

Winchester (1984) states that to understand the responses of Albertans to decentralization of institutions and authority, one must remember that Alberta is a province of farmers and descendents of farmers. "Farmers live a decentralized life ... and take it for granted that things are better when their life is decentralized" (p. 41). Local or individual determination of responses to changing conditions is the preferred method of planning all aspects of social and economic life in Alberta. This description of Albertan thinking may be the key to developing public acceptance of further developments in the postsecondary educational system. Berghofer and Vladicka also stress the "sense of community and creation of a new society" (1980, p. 59) which underlies the strength of community involvement in the development of postsecondary education in the province.

The policy environment in Alberta is marked by continuing, conflicting viewpoints on diversity and control of postsecondary education. Overall, higher education in the province is seen as essential to economic and social growth, and equality of opportunity through reasonable access to higher education is an operating principle of government. Three major elements appear to underlie governmental stances throughout the history of postsecondary education in Alberta: centralization, or at most controlled decentralization of universities, is the most economic and the "best" way to ensure excellence in university education and research; a continuing belief that non-university education could and should be offered on a decentralized basis to ensure relevance of such education, and to maintain individuals in their home regions; and that non-university education would meet the majority of the postsecondary educational needs in the province, and provide the most flexibility and adaptability to changing manpower and economic needs.

In contrast, public opinion has consistently been that all postsecondary education, and particularly university education, should be available on a regional basis. The economic and social benefits of having university education available in the community are seen as far greater than those of non-university education. There is agreement with the government perspective which allowed comprehensive institutions in regional areas in order to prevent duplication of facilities, but at least some disagreement with the government that these institutions not be degree granting in any aspect. Multiple purpose, multiple level institutions have been seen as an acceptable and feasible way to meet regional postsecondary needs since the early history of the Alberta system.

CHAPTER 5

PERSPECTIVES OF THE SELECTED COLLEGE RESPONDENTS

This chapter provides a detailed description of the responses of the individuals interviewed at each selected public college. For each data category the commonalities evident in the responses are first discussed and then the differences in viewpoints are described. A summary of the major findings follows this description. The selected colleges are Grant MacEwan Community College, Grande Prairie Regional College, Keyano College, Medicine Hat College, and Red Deer College.

INTERVIEW FINDINGS

Demand and Need for Baccalaureate Education

All college respondents reported there was an increased community demand for university education, reflecting "rising personal and business expectations for higher levels of education" (President, Grande Prairie Regional College). This demand was expected to continue to grow throughout the foreseeable future. In addition, all individuals interviewed expressed their belief that the system of postsecondary education in Alberta should respond to this demand through increasing the availability of university education in the province. The factors seen as affecting the demand and need for increasing baccalaureate education provision in the province are discussed below.

Socio-Economic Factors

The development of an information-based economy in Alberta was seen by the respondents to require individuals to be initially educated at higher levels than previously, and require individuals to seek continuing education at higher levels to maintain the required knowledge and skills for jobs and positions. The President of Grant MacEwan Community College summarized this economy-driven demand as:

> Number one, we are clearly in an information based age, and information and knowledge go hand in hand with increased education of all kinds. In some cases education for career-oriented programs at a community college will be additional education, broadening horizontally - expanding of one's diploma so to speak. In other cases, people will see it as the need to get higher education, advanced education that is vertically oriented, to get a degree. To function adequately in an information society then, as a matter of course, many people will be pursuing higher education.

The President of Grande Prairie Regional College firmly believes that a baccalaureate degree is increasingly becoming the baseline requirement for "white collar jobs" in Alberta and, therefore, baccalaureate education must begin to be offered outside of the universities. She stated the traditional view of academic selection of the top ten to twenty percent of high school students for baccalaureate programs is outdated; these standards are seen as more fitting in the current world for graduate degree programs. To increase the access to baccalaureate programs, a need was seen to deliver such programs "close to home;" universities could then focus on professional and graduate programs, and further development of their research responsibilities.

Demand for University-transfer Programs in the Colleges

Applications to the university-transfer programs in the colleges represented in the study have shown a significant increase, and the number of applications for these programs exceeds the enrollment capacity of each of the representative colleges. The President of Medicine Hat College commented that this was contrary to the expectations of the Department of Advanced Education in 1980, at which time

> they told us that it was their expectation that university-transfer would remain constant; we would not see any significant change in university-

> transfer student numbers than we had. Well contrary to that, we have had a significant increase in that interval between 1980 and now.

Grant MacEwan Community College received government funding for operation and capital development of two year university-transfer programs in 1988. These programs replaced the previous individual university courses offered by the college. Considerable increases in this section of the college resulted. The President stated there was a marked increased in applications to these programs following the announcement of the seventy percent entrance requirement at the University of Alberta in 1988. However, he also pointed out that simply having a university-transfer program in a college will increase the demand for university education, by increasing both the availability of, and the individual motivation to gain access to such education.

> Many of our students who are taking a two year diploma will have greater access to a degree route now that the college has university-transfer. So there will be an increasing demand in general, not only from people who want to take a degree starting at Grant MacEwan, and not only from people who want a two year college diploma, but also people who are in the two year college diploma programs who say "thank you very much, I think I'd like to complete an arts or science or commerce degree while I'm at it."

The demand for baccalaureate education was not reflected in present university-transfer program enrollments at Grande Prairie Regional College. Cutbacks in operations effected over the past two years by the college for financial reasons have limited the number of programs offered and, therefore, limited enrollments

> not only by reducing the numbers of sections and putting limits on them, but we also narrowed the number of electives available. The choices decreased, the number of options in courses were limited, and we set a maximum number of students that we would take.
>
> So students who were enrolling later than others found their choices pretty limited, and although in some areas we could have offered more

> courses, taken in more students, the choice just wasn't there. Our enrollment dropped. It's coming up a bit this year.

Enrollment has been maintained, or slightly increased in the occupational and technological programs which receive outside funding. The President believes that the steadily increasing growth in university-transfer enrollments which occurred until 1987 at Grande Prairie Regional College would have continued if the college had adequate financial support to further develop its programs.

Changes in Student Demographics and Participation Rates

All respondents believed that the general interest and participation rates in university education have increased in the eighteen to twenty four age group, and markedly increased for adults over the age of twenty four.

The respondents agreed that the participation of mature students in university programs will show a continual increase over the next decade. The rising participation rates in university education were seen as demonstrating an increased social value attached to postsecondary education, particularly in terms of ensuring success in a career; and were seen as a direct result of the steadily increasing general educational level within Canadian society. The demand and participation rates for such education were not believed by the majority of respondents to be linked to swings in the provincial economy. The respondents from Keyano College, however, stated that the economy directly influences the enrollment patterns in that college. The Chairman of the Board stated that if another oil boom were to occur,

> we would probably have a decrease in university-transfer enrollments. Enrollment pressure would increase markedly in the whole trades and technology area. That is not to say that there would be no need to continue to offer university programs in the Ft. McMurray area, just that enrollments

might decrease, and interest decrease in the junior undergraduate university programs.

The President of Red Deer College believes that the participation rates in Alberta reflect a world increase in participation rates at the university level, and that this participation is not a transitory, situational event.

> I'm convinced that the participation rates in Alberta, although they are at an all time high, when compared with those in other provinces of Canada ... are very, very similar to the rest of Canada over the past ten years. So that, whereas for some time there has been a lot of discussion about the participation rates being influenced by the economy, and a belief that once the economy gets better in Alberta, we'll see the dwindling rates and return of the lower participation rates of the past, I think that there is a complete failure to look at the data from elsewhere.
>
> We were below the national norm ten years ago; we just finally surpassed the national norm in this past year. Even then we're just above it, and our national norm is still only half of the States.

Regional Perspectives on Access to Baccalaureate Programs

A need was seen by all respondents to increase the local or regional availability of complete baccalaureate degree programs. The responses of the President and Chairman of the Board of Medicine Hat College summarize the reasons given as rationale for this need:

> Increased provision of degree programs is a province-wide problem, which includes geographical location issues, but also includes population pressures in the major cities. As the effect of the capping of enrollments at the universities becomes more apparent, provision of local degree programs will become more of an issue in the community. Some extension of degree program provision must occur in order to relieve the enrollment pressures on the existing universities.

Regional Location and University Choice

Regional location appears to dictate which of the provincial residential universities students will attend, regardless of the availability of placements in particular programs in each university. Students in Medicine Hat apply for direct entry or transfer to the University of Calgary and the University of Lethbridge. Students in Red Deer, Grande Prairie, Fort McMurray, and Edmonton apply almost exclusively to the University of Alberta. In fact, the University of Alberta is perceived by the north and central Alberta communities as **their** university, and "students expect to have ready access to undergraduate programs at that university" (President, Grande Prairie Regional College). The Universities of Calgary and Lethbridge are considered the domain of southern Alberta students.

The President of Grande Prairie Regional College believes that students in part look to the University of Alberta for undergraduate programs because of the prestige of that institution. Students are not particularly concerned with the flexibility, or quality of the undergraduate degree provided. The college has openly encouraged its students enrolled in the education program to transfer to the University of Lethbridge Education Faculty.

> We say the U of L degree is certainly more acceptable in the job market in northwest Alberta (than is the U of A degree). The school boards will hire U of L graduates if they have any choice. That fact has very little impression on the students in education. They go to the U of A.

The impact of this regional perspective on appropriate university access was seen by the Chairman of the Board of Medicine Hat College as requiring the college to negotiate with

> the University of Lethbridge, and the University of Calgary as the two practical universities for us to deal with ... The involvement of these

> universities in degree completion programs offered at the college, or, at minimum, the approval of these universities of university level programs offered by the college, is crucial to the community acceptance of Medicine Hat College programs.

Advantages of University Education in the Community Colleges

The President of Grant MacEwan Community College stated that a major barrier to improving access to degree education in the Edmonton area has been removed through the approval of the university-transfer program in the college. He saw the college program as providing access to those students unable to meet the increased entrance requirements at the University of Alberta; and reflected the beliefs of the other college respondents as to the advantages of college university-transfer programs:

> [Such programs make it possible] for students to be able to attend a smaller institution, to be in classrooms that are student-oriented; with teachers whose primary responsibility is teaching. A college environment where the students can feel that they are treated as individuals is very important.

The President believes that many students graduating from high school find the University of Alberta a very impersonal environment, and the college can provide a "bridge" between high school and university.

The respondents for Medicine Hat College believe that the demand for complete degree programs in that community is in part based on the community perception of the excellence of the current college university-transfer programs.

Need for Regional Provision of Baccalaureate Programs

A major need in the Fort McMurray community was seen as provision of complete degree programs for the adult population in the community.

> The eighteen or nineteen year old who is coming to our institution for a couple of years of university-transfer, and then go on down to U of A, they are mobile, they can do that.
>
> The problem comes when we have people who are returning to school after years of absence, or who are taking their studies on a part-time basis. It is impossible for them to relocate to get a degree ... [it involves] disrupting their family, quitting their job, all those kinds of factors. I mean it's just impossible for these people to do that. (President, Keyano College)

The President stated that "at least half of our university-transfer students" would not be able to complete their degrees, if they were required to move to Edmonton to attend the University of Alberta. According to the 1988-89 enrollment statistics "fifty percent of Keyano College students are above the age of twenty-five." Thirty-one percent of part-time students enrolled in credit programs are over the age of thirty. In contrast, the President estimated that only about twenty percent of the full-time students enrolled in the college fall into the eighteen to twenty year old age group. He believes that this age distribution of students is somewhat atypical in the Alberta college system.

The President of Medicine Hat College also saw a newly emergent need for baccalaureate education in the Medicine Hat region

> The student body has changed. We have a large number of mature students on campus now, many of whom are single parents, and so they don't have the freedom to move as easily as students out of high school would have. We also have people who are working, they're employed or they have their businesses here in Medicine Hat. They are able to take a class at a time, or maybe more than one; they can adjust their hours to accomplish that; but they can't adjust their lifestyle so radically as to go out to a university in a distance place. And there is (personal) economics involved in all this too.

He also believed the interest in complete degree programs reflects the rising level of education in the Medicine Hat community.

> We encounter people in the mall, or they see you on Saturday morning, and say, "I've done all the things I can do in Medicine Hat College, when are you going to bring in third and fourth year courses?' So it's been more of an individual thing than it has been a group activity.

The President of Red Deer College supported this response in his contention that "large numbers of individuals in the community perceive that there are insurmountable obstacles preventing their attendance at programs in Calgary or Edmonton." Some of the obstacles perceived are financial considerations, entrance requirements, and an inability to manage part-time studies and residency requirements in either university.

The President of Grande Prairie Regional College stated that an undergraduate degree is becoming more of a necessity in society, and therefore regional provision of such programs is necessary to meet the needs of all categories of prospective students.

> Now we're worried if kids don't complete Grade 12 - they're dropouts. More and more of the business work world is asking for an undergraduate university degree, where before they were asking for high school graduation. So an undergraduate degree is not that uncommon, and should, I think, be delivered close to home. We should be looking at the graduate degree as the point at which one becomes better educated than average, that is, than a lot of the community.

Providing local opportunities for baccalaureate programs to meet the needs of the traditional students (age eighteen to twenty-four) was also seen as a distinct need by the respondents in Medicine Hat and Red Deer. The President of Red Deer College believes there is a greater demand for baccalaureate program enrollments in the province than can be accommodated by the existing universities. The respondents of Medicine Hat College stated that some extension of degree programs is necessary in order to relieve the enrollment pressures on the existing universities, but saw extension of such programs as primarily necessary to provide equitable access to such programs in the regional areas. The

Chairman of the Board emphasized his belief that a community college exists to meet the required community needs.

> To some degree, we're probably a little different from what will happen in the cities. In the cities you have a choice between the college and a university. Out here, if you want to take something, you either have to go to the city, or the college has to supply it. I think being a long way from the major centers does affect what we do.

In contrast, the President of Grande Prairie Regional College reported on the necessity for young people to leave the community in order to "broaden their horizons." The Chairman of the Board of Keyano College added a direct concern that younger students in particular required exposure to the academic atmosphere provided by universities, in order to maximize their educational experience and personal growth.

The President of Grant MacEwan Community College expressed his belief that the two year university-transfer programs will meet the demonstrated community need in Edmonton, but does support creation of additional universities to meet demonstrated needs in other regions.

Capacity of the Existing Universities

In Edmonton, the President of Grant MacEwan Community College believed that the approval and the potential for further expansion of the university-transfer program at the college will meet the needs for university education in the region, in combination with the existing universities. The President of Keyano College, and the Chairman of the Board of Medicine Hat College also stated that there are adequate numbers of universities in the province to meet the [illegible] provided that systems to deliver baccalaureate education in the outlying regions are developed.

In contrast, the President of Red Deer College did not accept this point of view in assessing the need for baccalaureate education in the province. He did not believe that the present capacity of the universities, or expansion of the universities' capacity for enrollment, will be sufficient to meet the needs for baccalaureate program access.

> Just simply going back and increasing enrollment in transfer programs, and increasing third and fourth year enrollment at the University of Calgary, for example, will only be helpful to the extent that they will be able to accommodate what would be a red line crisis for this coming fall.
>
> By the next year (1990), we are way out of line - we are 4000 FTE places short in this province. And I think that's substantial. This is a quote from the U of C strategic plan, where they took the data as provided by Advanced Education; looked at the number of persons currently enrolled in university; looked at the trends in terms of the number of 18 to 24 year olds; and how the participation rates, by going up have in fact, resulted in projections of an increase which has not been planned for. Keeping the participation rates fixed at the current level, and there's every reason to believe it will go up, by 1990 there will be 4000 FTE more places required.

A clear indication that there is a problem with provision of degree education in the province was believed to be demonstrated by the public statements of the Minister of Advanced Education that "there may well be one or more of the community colleges being authorized to be degree granting" (President, Red Deer College).

Effects of Current Controls on University Enrollments

The respondents from Red Deer College, Medicine Hat College, and Keyano College all expressed their concern with the plans to control undergraduate enrollments at the University of Alberta and the University of Calgary. The outcome of such control of enrollment was seen as directly limiting access to university programs. The President of

Medicine Hat College expressed a major concern with the effect of the capping of enrollments at the University of Calgary.

> I heard the University of Calgary report that 700 students who wished to, aspired to, attend there were not allowed to enter because (the university) was filled to capacity. Now theoretically, those 700 students should fan out and go to other institutions. I don't think that happened; in fact, I'm confident it didn't happen.
>
> I have to ask myself what happened to those 700 students. Some are back in high school I'm sure, trying to upgrade their marks so they will get in next year. Some of them may well be on the unemployment roles. A group may be doing tasks and jobs they don't particularly like, and they are living an unfulfilled life. So I think there is a need to serve them in the larger center, just as surely as there is a need to serve them in the isolated center.

This concern with the effects of capping was shared by the Chairman of the Board. He firmly believed that the students who were not admitted to the universities, are "simply lost to the system. I don't want to ever see that happen if we can prevent it." At the same time, the Chairman of the Board did support the attempt of the University of Alberta to control its enrollment growth. "They are too large. They are getting to the stage when I'm not sure that the undergraduate degree is being executed properly, and the students seem to be multiplying."

The President of Grande Prairie Regional College did not believe the control of enrollments at these universities had an immediate effect on access, but believed reduced access may be a future outcome.

None of the respondents discussed enrollment capacities at either the University of Lethbridge or Athabasca University.

University Capability to Accept College Transfer Students

The respondents from Grant MacEwan Community College, Red Deer College, Keyano College, and Medicine Hat College believe that in 1990 there will not be sufficient places in the universities to accommodate transfer of the present numbers of college university-transfer students. The Chairman of the Board of Keyano College summarized this concern in this way:

> There will be a real problem with university-transfer access in two years. There has been a dramatic increase in university-transfer enrollments in all of the colleges. It is a critical issue in the province at this time. The Council of Board Chairmen met with the Minister and discussed it ... we're all very concerned about it.
>
> A major issue increasing the problem is the capping and decreasing of enrollments in the University of Alberta and University of Calgary.

The President of Grande Prairie Regional College did not believe a transfer crisis will occur in 1990, but did believe transfer could become a problem later in the decade.

> It's my understanding that the pressure on say, U of A, was not as great in the undergraduate programs as they thought it was going to be. The Engineering faculty, I guess, had a real problem. They didn't even manage to fill all their spaces, even by going below the required seventy percent average. I suspect there will be spaces.
>
> Now somewhere in the future there won't be, but I'm not concerned about two years from now, because the crunch wasn't there in first year, so I suspect there will be spaces.

All respondents emphasized their belief that college university-transfer students must be guaranteed that they will be able to complete their degree programs in Alberta. Some form of government intervention to resolve this issue was seen as necessary.

> I can see why first and second year students, freshmen and sophomores, can be better served perhaps by community colleges for the first two years of university-transfer. But the key thing is to guarantee access after those first two years.
>
> The biggest issue is accessibility to third year university programs through transfer. The Universities, mainly the U of A, but also the U of C, are burying their heads in the sand on the issue. The first time an academically qualified college transfer student is not admitted to third year at the university, a political crisis will occur. Then dramatic decisions may be made in response the the political impact and involvement. (President, Keyano College)

The President of Grant MacEwan Community College believes that the increased tendency within the University of Alberta and the University of Calgary to establish student quotas in undergraduate programs will create additional access problems. The result is that there simply will not be enough places for college transfer students, particularly in disciplines such as commerce.

> That is going to be a very sticky point. The community colleges such as Grant MacEwan maintain that students who successfully complete their two years of Commerce **have a right** to carry on and complete their degree in the university **system** of Alberta. Hopefully in the university close to home; the university of their choice.

All of the respondents believed that a failure to resolve the perceived transfer crisis would result in the College Boards actively pursuing degree granting status.

Community Perceptions of Athabasca University Degree Programs

Athabasca University programs were not viewed by the majority of respondents as an optimal mechanism for achieving university education; and all respondents believed that most members of their communities do not view the Athabasca university degree as being as valuable or credible a degree as an undergraduate degree from the other provincial universities. The exception to this viewpoint was the respondents from Keyano College, who view the Athabasca University - Keyano College Capstone project as "an extremely successful program which forms a model for extended degree program provision."

In the Medicine Hat community, the President stated that studying through Athabasca University

> isn't a fully accepted approach to pursuing a degree at this point. It takes a special individual who is committed and willing to persevere, and is willing to put up with something less than ideal in order to achieve their objectives.

The Chairman of the Board of this college was personally supportive of Athabasca University degrees, but did feel there was some negative community response to those degrees.

> It's always been felt that their degree is not as good as other university degrees, but not everyone is going to be looking at going on to a master's program or doctorate program. An AU degree will open up a lot of doors that aren't open to people right now.

Part of the problem with the acceptance of Athabasca University degrees as credible options to obtaining baccalaureate education was seen by the President of Grande Prairie Regional College as a lack of community awareness about the Athabasca programs.

> In northwest Alberta I think there is about three hundred people enrolled in Athabasca University. I only became aware of that because we had the Athabasca University Counsellor in house. These individuals (accessing Athabasca University) are those with some postsecondary education, who for individual reasons find themselves in isolation, and enroll in Athabasca University. But those individuals are not high profile as far as being students of Athabasca.

The President stated Grande Prairie Regional College attempted to raise the awareness of and perceptions of credibility of Athabasca University courses through providing space for a regional office and an on-site Athabasca counsellor. Through this mechanism, it was hoped that the personalized contact available would assist students in accessing Athabasca courses, and that more on-site Athabasca University courses would be offered at the college. Neither outcome occurred. The Athabasca University degree is believed by the President to have become more acceptable to college personnel and students since the format of the degree recently changed from three years to four, and she was hopeful that this would increase student interest in the Athabasca degree programs.

The President of Red Deer College stated that although the college pursued degree program arrangements with Athabasca University, "the students had no interest in such a program." The President reflected concern with the three year format of the Athabasca University degree programs, and the program requirements which he believes are a major factor in the demonstrated lack of interest by students in that degree.

> Athabasca insists that the individual, in order to get an Athabasca degree, has to take fifty percent of the courses through Athabasca, which would be asking the students of Red Deer College to forego six months of their studies in Red Deer College. I mean that's incredible. It seems to be preposterous that that would exist, but it does.

The President of Grant MacEwan College also pointed out that there may be some inequity in degree program provision, given that at present, residents in outlying communities are almost entirely restricted to Athabasca degree programs, unless they are willing to relocate. The President believes the Athabasca University degree is functionally equivalent to the degrees offered by the traditional universities, but "it still has to establish its credentials and credibility in both the outlying and urban communities."

Access to "Off-Campus" Baccalaureate Programs

Each of the college respondents reported that a limited number of off-campus programs are being provided by the universities at the respective colleges. Primarily these programs are Master of Education programs, and distance education post-basic Baccalaureate in Nursing Programs. Keyano College and Athabasca University have successfully implemented three Capstone model programs for baccalaureate education in Arts, Business Administration, and General Studies at Keyano College.

Red Deer College has been attempting to obtain off-campus programs at the baccalaureate level, primarily through negotiations with the University of Alberta for several years. The intent of the college was to arrange to have University of Alberta full degree programs offered at the college, particularly in disciplines where there was a high demand, and limited access in these programs at the University.

> We put together a proposal in Arts, and discussed that with the senior people at the University of Alberta, including the Senate, the President, the Vice Presidents, all of whom generally were showing support for the initiative.
>
> The proposal was that we would teach the first two years; provide funding for the third year; and would ask the U of A to teach and assume responsibility for the fourth year ... However, the Faculty of Arts did not support this. And when it went to GFC it was turned down.

A similar proposal to offer a Bachelor of Science degree was also not supported by that faculty at the University of Alberta. Most recently the college has been exploring a similar proposal with the Faculty of Nursing. The President stated that he was confident most nursing programs across Canada would view this proposal as an innovative plan that is a major breakthrough in the delivery of nursing education in Canada.

> The reality is, there is no breakthrough. The reality is that we have proposed a good plan, the Nursing Faculty is supportive, there is support at senior levels. However it has not been successful in going through the hurdles at U of A. In fact, it was turned down by a subcommittee of GFC. So today it hasn't even got through GFC. We are still working on that, by the way, but there is no reason to be optimistic. (statement made February 20, 1989)

No other baccalaureate program has been approved by the University of Alberta, or the University of Calgary, leading the President of Red Deer College to conclude that it was currently "very difficult to arrange for one of the senior institutions to offer degrees on an off-campus basis." (Note: In June of 1989, an agreement was reached between the University of Alberta and Red Deer College to provide a collaborative program in Nursing at Red Deer College).

Grande Prairie College formally negotiated provision of baccalaureate degree courses at Grande Prairie with Athabasca University, but was unsuccessful in having such courses implemented. Issues of funding, program control, and instructional qualifications seem to have been a major problem in this attempt.

> There are things you have to look at, at least we thought we did. Which courses, how would they be delivered, fee structures for students, financial arrangements ... we simply couldn't get together with Athabasca to get it arranged.
>
> Now we also didn't have the dollars to broker out of our base. I think if we'd had the dollars to buy the courses from Athabasca we would have had the arrangements very quickly.

All colleges with the exception of Keyano College and Grant MacEwan Community College were pursuing collaborative program arrangements with the existing universities, but no respondent was assured that such programs will be implemented.

The Quality of Current Baccalaureate Degree Programs

University Degree Programs

A common perception reported by the college spokespersons was that the major universities are not providing a quality baccalaureate degree. This perception appeared to be based, in part, on the size of the institutions and the large numbers of students in each undergraduate class, leading to a belief that the universities were not providing individual attention or quality teaching; on a belief that many undergraduate classes are taught by graduate students and not university professors; and the focus of the University of Alberta and the University of Calgary on research and graduate programs. There was a belief that the University of Lethbridge was also tending to focus more on these aspects than on further development of its undergraduate programs. These feelings have been enhanced by the University of Alberta draft plans and policies which propose a greater focus on graduate studies and research, by the published positions on the need for graduate studies and research, and by the limitation of undergraduate enrollment to previous year levels at the University of Calgary. These actions appear to have created some suspicion in the colleges and their communities that at least the University of Alberta, and likely the University of Calgary, no longer view undergraduate education as a priority, and that further reduction in quality of programs will occur.

The President of Grande Prairie Regional College did not believe that baccalaureate education should or can occur only in universities. The current residency requirements of the traditional universities are seen as "ridiculous." In addition, the need for an "academic environment" was questioned in terms of the experiences presently undergone by undergraduates in the large universities. Undergraduates were seen to rarely utilize the resources of the libraries; they are often taught by graduate students, not professors; and have limited exposure to the sophisticated equipment available. In addition, the President believed one must question the need for full exposure to these resources and facilities, if the primary purpose of undergraduate education is job preparation.

Concerns with Current University Residency Requirements

All respondents expressed a concern that the residency requirements of the Universities, that is, that at least half of the courses leading to a degree must be completed at or through the degree granting institution, and the time limits placed on completing degree requirements particularly restricts the participation of adults who require access to part-time studies. Such residency requirements were seen as outdated and as having little validity in terms of maintaining quality in baccalaureate degree programs.

> In an information age, does it really make sense that the student has to be placebound in order to acquire the flavor associated with a university degree? It doesn't seem to be a viable notion to my mind anymore. After all the President of the University of Alberta did his own undergraduate degree on a part-time basis in Montreal, and he seems to have worked out all right. (President, Grant MacEwan Community College)

College University-Transfer Programs

Red Deer College, Medicine Hat College, and Grande Prairie College respondents felt strongly that quality baccalaureate programming is and could be better provided by the colleges due too their focus on teaching, their maintenance of small classes, and their proven record of success in preparing university-transfer students. The President of Red Deer College stated the stance of the Universities' Coordinating Council that no further degree granting institutions be created in the province, reflects a concern that the quality of university education would suffer if it were to be taken out of the hands of the established universities.

> I can't believe that people would seriously accept that. I think they missed the whole point. If one was really prepared to give that concern credibility,

> then we should be looking at how the transfer students do when they enter university. The fact that they are outperforming their cohort at university should cause the question to be exactly the other way around.

The Presidents of Grant MacEwan College and Keyano College believe these colleges also do an excellent job of the two year university-transfer program, assessed in terms of student success, but had no wish to offer third or fourth year. The Keyano College respondents did not believe that the college could develop the quality needed in such programs.

However, the President of Grande Prairie Regional College stated that universities should focus on and develop excellent graduate programs, and supply services and assistance to "decant" undergraduate education. Within the college, instruction is focused on the student and his needs, and therefore is believed to better meet the requirements for quality undergraduate education.

Research and Baccalaureate Education

The focus of the community colleges on teaching rather than research was seen by the President of Red Deer College and Grande Prairie Regional College as an advantage in providing quality baccalaureate education.

> I think that the universities are caught in that very tough situation where their mandate is such, and the expectation for what they are able to achieve by way of research works to the detriment of their undergraduate programs. (President, Red Deer College)

The Presidents of Medicine Hat College, Keyano College, and Grant MacEwan College appeared to believe that research by faculty is essential to quality in baccalaureate programs.

Required Faculty Qualifications

All respondents agreed that faculty qualified at the PhD level is essential to provision of quality baccalaureate programs. Only Keyano College reported difficulty in recruiting individual faculty at this level of preparation. All respondent colleges have been encouraging staff in the university-transfer programs to obtain such qualifications.

The President of Grande Prairie Regional College stated that the strong staff development and professional leave program at the college has resulted in a stable, long-term faculty with credentials at either the masters or doctoral level. This situation was also evident in the remaining colleges.

Roles and Mandates of Institutions

All college respondents stated that the community colleges in Alberta are a "success" in meeting the postsecondary educational needs of their communities. All respondents firmly believed that the colleges' role in provision of non-university postsecondary educational programs must continue. The President of Grant MacEwan Community College noted that the success of the community colleges is "in large part based on the high rate of employment of the graduates of these (career-based) programs."

Differences in opinion existed as to whether programs offered solely by the community colleges should include programs longer than two years in length, particularly in terms of programs leading to baccalaureate degrees. The President of Keyano College was concerned that there appears to be a "hierarchy of institutions in education" in the province.

> A university is better than community college, which is better than a high school, which is better than a junior high, which is better than an elementary school. I have real problems with that mentality.

> My view is a community college is different. It is not a university, nor should aspire to be a university. We have a unique niche in providing services to our community. I would hate to lose that, if gaining degree granting status implied that there would be a loss or dilution of that kind of service orientation.

All respondents believed that community colleges should reflect the needs of their community, and that community needs vary dependent on the location of the college.

The Role of the Private Colleges

The private colleges were not seen by any of the respondents as having a significant impact in solving the demand for access to baccalaureate programs. The President of Grande Prairie Regional College believes this is due to a lack of community awareness of these institutions and programs. "Only the various religious groups are aware of, and access these programs. They have no impact generally when students are considering applications to degree programs." The President of Red Deer College also believed these colleges are a viable option for only a minority group of individuals in Alberta. The Registrar of Camrose Lutheran College reported, in an informal conversation with the researcher, that Camrose Lutheran College has a major concern with the effect of extending degree granting capability to Red Deer College on recruitment and enrollment of students at Camrose Lutheran. The President of Red Deer College did not see this as an issue. He claimed that the data available on student preferences and enrollments for the colleges have not been examined by Camrose Lutheran College; students prefer Red Deer College because of lower cost and many other factors.

Desirability of Extending Degree Granting Capability to the Public Colleges

Extension of degree granting authority to allow the public colleges to grant a limited number of baccalaureate degrees was seen as desirable, or potentially desirable, by three of the five college respondents, and in exceptional circumstances, desirable by a fourth college respondent. Such extension was seen as completely undesirable by the fifth college respondent. None of the respondent colleges were interested in becoming a university, that is, an institution offering solely degree granting programs. All respondents shared the belief of the President of Medicine Hat College that to convert the public colleges to a university would "deprive this community of the kind of service the college is capable of providing ... The college board, and the college personnel take pride in their ability to serve a varied group of people."

The Positions of the Individual Colleges

Red Deer College

Red Deer College was formally pursuing selected degree granting capability, based on the difficulties encountered in arranging brokered degree programs, and "a sense of urgency brought about by the capping of enrollments, and downsizing of enrollments at the University of Calgary and the University of Alberta" (President, Red Deer College). A task force was established by the President to assess the need for, and the community support of degree granting capability for Red Deer College in 1988. The task force recommended that the college proceed in this direction, and in February, 1989, the College Board approved "that Red Deer College seek degree granting capability at the undergraduate level, in select program areas." The President stated the intent is to develop Red Deer College as a "University College" which offers both degree and diploma programs.

Medicine Hat College

Medicine Hat College has a long-standing interest in seeking degree granting capability. The Chairman of the Board reviewed the history of the college in considering degree-granting capability. Beginning in 1979, the Board passed a resolution to seek expansion of the number of terminal programs offered by the college, with consideration given in part to degree completion programs. This resolution was followed by a concerted effort to encourage and provide financial support to instructors to upgrade their qualifications to a master's or doctorate level. In 1985, the Board proposed that an arrangement be pursued with the University of Lethbridge to provide a baccalaureate degree at the college. This led to development of an experimental program which provides a Master of Education program at the college. One college instructor is seconded to the University of Lethbridge on a part-time basis and assumes the major teaching responsibility in this program.

> We've always been interested in degree granting, not necessarily the college offering degrees, that may well be an offshoot at some stage, but the presentation of university degrees so that people have the opportunity to obtain a baccalaureate degree without leaving Medicine Hat. (Chairman of the Board)

The Board Chairman emphasized that the possibility of Medicine Hat College offering its own degrees may be something that will be pursued if it becomes practical, and apparent that a need exists in the community. Degree granting capability for Medicine Hat College will only be pursued if there is community support. The President did not believe the college interest in degree granting has been affected by the cutbacks in undergraduate enrollments at the University of Calgary or the University of Alberta. "I don't think there has been any acceleration or increased emphasis as the result of decisions made in the universities."

The college has established an advisory committee to inventory the institutional resources, outline the courses required to achieved a baccalaureate in a limited number of areas, and to assess library and resource needs. One intent is to identify college staff with potentially acceptable qualifications to be appointed by a university to teach senior undergraduate courses at the college. Types of programs considered most likely to be implemented are: Bachelor of Arts; Bachelor of Science; and a Bachelor of science in Nursing. Serious consideration is also being given to a Bachelor of Education, and a Bachelor of Commerce (Business) program.

The Chairman of the Board stated that currently Medicine Hat College is attempting to make arrangements with the University of Lethbridge to offer the third and fourth years of a Business degree program. Although interested in arrangements to offer third and fourth years of a baccalaureate program in Arts and Science, "it takes two parties to do that, and we have to convince the universities involved that these are appropriate degrees to offer. I think that will evolve."

The college had no interest in offering professional programs such as Medicine, Dentistry, or Law, or in offering programs which require extensive facilities not available currently in the Medicine Hat region or college.

> The outlay, the physical facility requirements, the kind of staff, the liaison with hospitals -- this hospital still transports patients to Calgary for special types of care -- it would require a major upgrading of all the community facilities. I don't think there is any justification for that at this juncture.
>
> If our record remains intact regarding [the quality of] our preprofessional programs, great! They get a good basic education here, and go on to other institutions.

The college was in the process of preparing a position paper for the Department of Advanced Education concerning development of degree granting programs. The intent was to establish collaborative programs, and then based on the success of these programs, pursue degree granting capability.

Grande Prairie College

The Board of Governors is interested in degree completion of some kind, based on college identified needs for programs. A goal statement developed for the 1985 to 1990 time period has as a major focus development of degree granting capability in the college. Some members of the Board of Grande Prairie Regional College do feel that degree completion programs in the college "is not quite a misdirection, but perhaps the wrong emphasis for this college" (President, Grande Prairie College). A need is seen in the Grande Prairie region by these individuals for preparation of people in skilled occupations, not preparation at a general undergraduate degree level.

The President of Grande Prairie Regional College stated

> students really aren't interested in a Grande Prairie degree. They want a degree from an established institution. So the student voice would go for not Grande Prairie (granting a degree), but that some other arrangement be made for degree completion in the community. The students are very supportive of that, but again from an established university, and preferably U of A.

A small number of people in the community and in the faculty are believed to want university status for the college, although some uncertainty exists as to whether the contention is for a university, or for the college to have degree granting capability.

> I think the majority don't really understand what "university" means in terms of the full extent of offering graduate studies, research, etc. Probably they are really thinking of what you and I would call undergraduate degrees.

The primary consideration of this group appeared to be a desire to provide undergraduate degree programs in the community.

The President described the official position of the college as "for the foreseeable future, brokering degrees from the four universities is the answer" to expanding provision of degree completion programs in the college. Only a few selected undergraduate degrees are being discussed, including a Bachelor of Science in Nursing in conjunction with the University of Alberta; and a Bachelor of Arts in conjunction with Athabasca University. A subcommittee of faculty had been established to identify possible areas in which to pursue brokered degree programs, and to determine the feasibility of pursuing such programs with the various universities. This committee was examining approximately twelve degree possibilities in terms of desirability and feasibility for the college including Bachelor of Science specializations in Biological Studies, Environmental Studies, and Mathematics; Bachelor of Education with specializations in Art, Biological Sciences, Business Education, Drama, English, General Sciences, Mathematics, Modern Languages, Music, Physical Education, and Social Studies; Bachelor of Social Work; Bachelor of Management; Bachelor of Commerce; Bachelor of Arts; Bachelor of Physical Education, and Bachelor of Nursing.

> Hopefully, we will have teams of faculty going out and talking to faculties and departments of various universities, once we've identified what degrees we want to offer, or at least explore, and which university would fit our needs the best.

Keyano College

The Chairman of the Board and the President of Keyano College did not believe that extension of degree granting capability to the public colleges is desirable. The college believes its role should be that of a facilitator of degree education at both the undergraduate and graduate level; to offer degrees would be to convert the college to a university. This was seen to be contrary to the educational needs of the community. Therefore, the college sees its role as providing its present variety of programming; and facilitating degree programs offered by Albertan, out of province, and out of country degree granting institutions.

Providing a degree program in nursing, or providing a degree program which is simply an extension of an already existing occupational program in the college was the only area in which degree granting capability was seen as desirable or feasible. The President stated that this is the only type of degree which is consistent with the role of a community college.

> Degree granting status is not consistent with the philosophy and direction of a community college. The only exception I could see at this point is in the area of nursing, with the move to having a Bachelor of Science in Nursing as the entry level into the nursing profession.
>
> We are preparing people for employment. If the requirements for preparation for employment require that you have a degree, then that would make sense. But it doesn't make sense to me then to say, fine, now we better do it in engineering because their are local job opportunities in that field, or a general arts degree, or whatever.
>
> If a degree program would be an extension of what we do at the diploma level, and the profession, the licensing authority, stated a degree was now required; and if this requirement receives approval; our institution would be interested in pursuing degree granting status for that program simply because that is the entry level. We currently do a diploma in nursing, and this would simply mean that a degree would be the entry level as opposed to a diploma.
>
> In order to serve our community, and the interests we have - we have a fairly significant number of people who are applying for positions or for access into our nursing program - that would make sense. To pursue the granting of degrees generally in the college, in my perspective, is not consistent with the role of a community college.

Keyano College was continuing to explore additional degree completion programs as part of the Capstone arrangement with Athabasca University, and with other universities both within and external to the province.

Grant MacEwan Community College

The Academic Council of Grant MacEwan College has developed a position that Grant MacEwan Community College will not offer complete degree programs. The President was strongly opposed to any consideration of degree granting capability being extended to the college.

> I find it difficult not to be a bit surprised when people ask the question about degree-granting community colleges. It is antithetical to our purpose. To put it in perspective it is vital that one understands the community college role. These incredible institutions built over the last 20 years in Canada represent a revolutionary concept in postsecondary education. The traditional, conservative Canadian university model has been counter balanced by a flexible, innovative, and responsive community college meeting the needs of thousands of single parents, older students, career specific students, etc. whom the universities were not able to help.
>
> If we become degree granting, the normal pressures for research and publication would eventually shift us from our original broader based community-responsive mandate. The question makes as much sense as me going to a high school principal and asking "do you plan to become a college?" Or in a similar vein would one ask if a junior high school thinks they will do a better job if they were a high school. They'd look at me as if I was from the moon.
>
> Colleges have filled a badly needed gap in our educational system. The whole broad based community college philosophy of providing community responsive programs, courses, projects, as well as an alternative for people who want to start on a degrees at a college, precludes utilizing limited resources for more expensive four year degrees for fewer people.

The President stated that it is undesirable not only from a philosophical point of view, that is, degree granting is not part of the community college mandate, but also from a resource point of view. There was no discussion of brokered or collaborative degree programs being offered at Grant MacEwan Community College.

Grant MacEwan College was planning to expand its university-transfer programs to include physical education, and possible extension of the nursing program course offerings, in order for students to obtain further transfer credit towards an undergraduate degree in that discipline.

Factors Affecting Perspectives of Desirability

The history of development within the college, the structure and climate existent in each college, the resource capability, and philosophical beliefs about university level education appear to be major factors affecting the respondents' perspectives of the potential effect of degree granting capability on college operations, organizational climate, and access to postsecondary education in the province.

Possible Effects on College Operations

Ability to Continue to Offer Comprehensive Programming

A decision to grant degree granting capability to the public colleges was not seen by the President of Red Deer College, Medicine Hat College, and Grande Prairie college as likely to affect the current programming and operations of the college.

> We would want [the comprehensive community college mandate] to remain intact. We see ourselves as a full service institution, and that's in place because of two reasons. Firstly, our geographical location influences that. Secondly, the Board has been deliberate in saying we want to provide the

> maximum in educational opportunity for the people. (President, Medicine Hat College)
>
> It's a question of how the college sees itself, and two more years won't change that. It's taken a while for the college to be a college, rather than, as someone in the community said to me "the college is university-transfer plus add-ons!" And I said "IT IS NOT!' Degree granting will not change that. (President, Grande Prairie Regional College)
>
> Adding degree granting capability (to Red Deer College) would simply involve expansion and extension of the present university education role of the college. (President, Red Deer College)

The respondents for Keyano College and Grant MacEwan Community College however, stated that the addition of general degree granting capability to the colleges would have great impact on college operations, initially leading to gradual erosion of non-university programs, and eventually resulting in "conversion of the college to a university" (President, Keyano College).

> In terms of resources, what happens over time, the transfer component could easily become the focal point of the institution. In general, the comprehensive community college mandate incorporates as part of its programming mix, technical programming, career programming, high school upgrading, and university-transfer. A two year university-transfer component itself, unless it's well integrated can dominate a college in a variety of ways. (President, Grant MacEwan Community College)

University-transfer program instructors have a high participation rate in the management committees of the institution such as faculty associations, the academic council and the Board of Governors. The President of Grant MacEwan Community College believed that some of the university-transfer instructors

> are perhaps frustrated university professors. You know, [the concept of], "presently I'm in a community college. When I'm really recognized as to how good I am at this level, I'll be teaching senior undergraduate or

> graduate students at a university. Unless of course, while I'm here, we can make this place into a university." So there is a tendency to continually want to teach higher and higher level courses.

Because of these underlying desires, and the involvement of these individuals in management of the institution, the President was concerned that budget decisions would tend to favor the university component. Therefore a drain of both capital and human resources from the "broader base of the community college concept begins to occur." The President emphasized that

> We do an outstanding job of catering to bright young people right out of high school, but we must also cater to the adult, forty years old, quit school in grade eight, but has the capability to attain a university degree. The role of the instructor is to bring them along from where they are at the grade eight level to the second year university level so they can transfer on.
>
> It's a broader ball game, and our students tend to have more diverse backgrounds academically and socially, and the community college focus is on working with a wide range of people.

Effects on Organizational Climate

The President of Medicine Hat College believed that some tension would occur within the college staff if degree granting capability is achieved. "There will be an outcry that's likely to be heard over 'elitism'. University people are somehow seen as unique, separate, superior." Good management techniques are seen as necessary to prevent the tensions from becoming serious. The faculty at Medicine Hat College was seen as having some reservations, but no strong sense of faculty resistance is being perceived. The most common faculty reservations are based in concern with ensuring that current programs are at their highest quality before adding more; and with the adequacy of the current library. Some faculty are "hesitant about change," whereas other faculty see the proposed change as an opportunity for professional growth.

The President of Grande Prairie Regional College did not believe that degree granting status would impact college operations to any greater extent that university-transfer has in the past:

> Certainly John Dennison [from the University of British Columbia] has been here and advised us **strongly** against any degree granting programs because it would distort - and I simply say, well, having university-transfer distorts. You know he talks about a pecking order, and the priority placed on university-transfer. Every institution I've been in has had its academic pecking order ... whatever type of institution it is, there will be those who consider that because of their qualifications, they are the prestigious ones, and others who feel they are second class citizens. When I was in a C.A.A.T. in Ontario, it was the three year technology program and academic upgrading program instructors who were the second class citizens. In the university, applied degrees in academe are not seen as being as precious as pure degrees.

The President of Red Deer College believed that the addition of degree granting capability could affect college operations, dependent on the particular situation in each college, and dependent on how the addition of degree granting capability was managed within each college.

> I would suggest that there are colleges in this province who are new into university-transfer, who are having trouble integrating university-transfer with the rest of their programs. And there are colleges who have had, both in Alberta and elsewhere, a lot of difficulty having university-transfer, trades and technology, and one and two year certificate/diploma career programs in the same institution. I think there are lots of them that have had difficulties keeping those integrated.
>
> That's something that's one of our strengths. We are completed integrated in that regard. We have one faculty contract as an example. We have faculty that teach across programs. Integration has been managed very well here.

The President of Grant MacEwan Community College believed that a pecking order among the faculty, with the university-transfer instructors at the apex, forms easily unless management acts to prevent this development. Grant MacEwan Community College was experiencing some faculty dissension due to the addition of the university- transfer programs, based on opposing views of whether such programs should be an integral part of a comprehensive community college.

Possible Effects on Access to Postsecondary Education

The respondents of Red Deer College, Medicine Hat College, and Grande Prairie Regional College stated that extension of degree granting capability to the public colleges is one of many policy decisions which will be required to meet the need for equitable access to baccalaureate education in the province. A major factor in the desirability of extending degree granting capability was seen as the reduction in personal costs to potential students in the outlying regions who access these programs, and thereby promoting greater equity in access to baccalaureate programs

> I would estimate that a student who stays at home for those couple of years [the senior undergraduate years] could save as much as $45,000.00 easily. That's a lot of money. (Chairman of the Board, Medicine Hat College)

The distinct need in the Fort McMurray area was seen by the President as "a comprehensive educational institution, non degree granting." He believes community colleges should reflect the needs of their communities, and based on that, stated his view might be different if

> I were in Calgary, or if I were in Red Deer, and it was problematic for students to access universities, or whatever, and there was tremendous demand in the community, maybe my view would be different. ... I don't sense a tremendous need in our community for degree granting. We have other avenues available through the Athabasca University Capstone

> program. I think our needs are being mat. Maybe that's not the case in Red Deer; maybe that's not the case in Calgary.

The views of the communities and individual college personnel may also reflect a belief that universities are more prestigious, or will better meet the social and economic needs of society than will colleges. None of the respondents believed this was a predominant view in any college or community, but felt it was a factor which required consideration in assessing the impact of extending degree granting capability.

The President of Red Deer College pointed out the the proposal for degree granting capability for Red Deer College is not unique in Canada, or North America. He believed it reflects a trend to provide improved access to university education, and a recognition of the need to develop alternate ways of providing such education. The Colleges of Advanced Education in Australia are seen as one highly possible model for development of degree granting capability in the the public colleges of Alberta, as are other developments in Canada and the United States.

> We know about what is happening in B. C. today, and the number of colleges seeking to become degree granting. That also holds true in Ontario.
>
> I will take one (college) that is pretty classic to make the point. Miami-Dade is identified as one of the major colleges in North America - it is a very large college, 65,000 FTEs. It's about twice the size of U of A. Its primary mandate has been English as a Second Language, adult upgrading, all those very junior level courses intended to deal with literacy. In Miami - Dade today they are currently exploring degree granting based on need. Does that mean they will get out of their literacy course? NO!
>
> What's happening is that right across Canada, the strong colleges are seeking to become degree granting.... The magic of believing that a college should be a two year institution, and a university four plus years is

> nonsensical -- what do the number of years mean? How does it relate to today? (President, Red Deer College)

The President reflected that there are four year institutions in both the United States and Europe which focus on undergraduate education, and some of which offer applied and occupational programs in addition to degree programs. He believes society has evolved beyond the traditional structure of occupation or university education "where it was envisioned that students would decide one route or another forever more."

Extension of degree granting capability to the colleges was seen by this President to reflect the free enterprise and entrepreneurial spirit of Alberta. He views competition between institutions as healthy but doubts that in actuality there would be much competition for students between the institutions.

Economic Desirability

The respondents of the colleges most interested in extending degree granting capability stated extension of degree granting authority to the colleges was more economically desirable than creating new degree granting institutions. In addition, the Chairman of the Board of Medicine Hat colleges stated that

> greater social and economical benefits to the communities in which the colleges are located could possibly be extended if complete degree programs were included in the college offerings. Just having the instructors provides a lot of education, and really upgrades the quality of the community.

The Keyano college respondents believed that the costs of extending degree granting authority to the colleges would be "enormous," however, and the rationale for such extension cannot be economically or politically justified. The President of Grant MacEwan College stated that "it is simply not possible to do both degree and non-degree programming from one budget." He pointed out that Grant MacEwan College received approximately one and a half million dollars to renovate facilities, create facilities, and expand the Learning Resource Center in order to accommodate the university-transfer programs. Creation of complete degree programs in colleges "will absorb oodles of resources, both operating and capital."

Quality of Proposed College Degree Programs

None of the college respondents representing colleges interested in degree granting capability believed their college would offer a lower quality degree than the present universities. A strongly emphasized point was that no program would be extended in these colleges unless the college felt assured that quality would continue. Quality of programming was seen as being directly related to expansion of existing library resources and facilities. The President of Medicine Hat reflected the viewpoints of these representatives in his statements that Medicine Hat College would not offer degree programs until there was assurance that this was a quality program.

> Medicine Hat College has no interest in being mediocre. I don't think it applies. There is nothing that says we can't do the task as well as another institution in a different location. We have demonstrated over time - the twenty-four years of our existence - that we have been able to meet and exceed standards just as capably as anyone in the system. Why would that change? I see that would remain constant, we would do that (university level) well, the trades well, the technologies well, the public service well.

The President of Keyano College, however, did not believe that the college can develop the quality needed in such programs. He stated there is quality in the present college programs, and an extension to complete degree programs would dilute that quality. In order to develop quality in degree programs, the President believes students must have access to "a top-notch library;" well-qualified faculty, and "the other support services that traditionally go along with being a university." Even if funding were available to provide such services, the President did not believe Keyano College would pursue degree granting status "unless there were some special kind of requirement. My view is that degree granting status is not consistent with what community colleges are all about." The Chairman of the Board of Keyano College believes that an academic atmosphere is a necessary component to quality baccalaureate education, and that it is impossible to provide such an atmosphere within a public college.

No difficulties have been encountered to date in recruiting appropriately qualified staff at any of the colleges other than Keyano. This is believed to be due in part to the emphasis on, and encouragement of staff development within the colleges. At Medicine Hat College, staff development funds exist to provide special incentive to staff to upgrade their qualifications, in addition to the sabbatical leave funding provided in all public colleges. A considerable problem exists in Fort McMurray in attracting qualified faculty to the college. The Chairman did state it may be more desirable and feasible for a college such as Grant MacEwan.

Research activities are undertaken by faculty at Medicine Hat College, and funded through an Endowment fund established by the College board approximately six years ago. Faculty submit proposals to an academic committee for approval of funding. The President "is very happy with it. As time goes by we hope we can increase the size of the endowment, and increase our contributions to research."

The President of Red Deer College stated that the college would not change its emphasis on teaching if baccalaureate programs were offered in the college. Any research done would continue to be of an applied nature and would have "a lower priority than teaching."

Feasibility of Extending Degree Granting Capability to the Public Colleges

System Considerations

Some mechanism to extend baccalaureate program provision in the province was seen as both mandatory and feasible by all respondents. The President of Grande Prairie Regional College stated that the Department of Advanced Education is "making a mistake in sitting back; a coordinated system will only result if they take some action, and issue some directives." Otherwise, she believes each college will do its own thing, resulting in an inequitable conflict-ridden system.

> I know that officially their [Advanced Education] stance is that there will be no degree granting capability extended to colleges, but unofficially they certainly seem to be allowing Red Deer in particular to explore such a possibility. This heightens expectations that degree granting capability will be allowed.

If the opportunity existed for colleges to grant degrees, Grande Prairie Regional College would pursue such status, if funding were available. "We would be very concerned that we not become a 'second sister' in the college system of Alberta "(ibid.).

The President of Red Deer College believed the universities have already clearly stated their position on extending degree granting status through the Universities Coordinating Council. He claimed the Coordinating Council has presented an argument to the Minister of Advanced Education that there should be no more degree granting institutions in the province. The College counter argument is that the present system of degree granting is not meeting the needs in the province; and the universities' own data demonstrate that the need is not being met.

He believed the institutions should be involved in developing a solution to the need to extend degree programs in the province. Extension of degree granting capability to Red Deer College is "just one approach among a whole large number that have to be taken." Extension of such capability to the college will not meet the need for 4000 FTE places in 1990. The President of Medicine Hat College also believed a policy decision to extend degree granting capability to the public colleges would be feasible, and "provided all the factors are considered, explored and properly dealt with," may be the most viable solution to the current enrollment pressures at the universities. He states that a mechanism such as the Private Colleges Accreditation Board, with a modification of legislation, could be established to accredit other institutions to offer degree granting programs. "I sense there will be some resistance along the way [to such a policy decision] on the part of the universities."

The President of Grant MacEwan College stated that if any college in the province wants to become a university, it should be permitted to do so, but expressed a hope that "the people in the community would advocate the development of a community college in that area very quickly, because it will be very much needed." His strong belief was that degree granting, and comprehensive community college programs can not be accomplished from one budget base; and that any policy decision of this nature "will affect the future of community college education in Alberta ... I think if it [degree granting] should occur, it would be most unfortunate for the community college movement."

The President of Keyano College stated that for three years he has been a member of the Advisory Committee on College Affairs to the Minister of Advanced Education. The question of extending degree granting capability to the public colleges was discussed at length by this committee, which concluded that "the pursuit of degree granting status was inappropriate for community colleges." The President strongly supported that view, listing as reasons which affect both desirability and feasibility:

> I look at a number of things beyond the cost factor - the practicality - the costs incurred in having our institution become degree granting, particularly library, space, faculty. Those kinds of things are very problematic, and then there is the real practicality of it. How many PhDs are we going to have that want to live in Ft. McMurray? How many students are going to want to come to an institution that at best is going to have a marginal reputation?

The President of Grande Prairie Regional College stated that development of effective approaches to extend degree completion programs is very difficult because of the significant regional disparities within the province, and the significant financial base differences in the colleges. She did believe that the colleges in Edmonton and Calgary would have less need of extending degree granting programs due to the existence of multiple post-secondary educational institutions in those cities.

Institutional Feasibility

The President of Red Deer College stated that degree granting capability is feasible for Red Deer College, partly because of its focus on staff development, which has resulted in large numbers of faculty prepared at the PhD level, but also due to the length of time in which Red Deer College has been involved in university-transfer education.

> We started out there - many other colleges that are in university-transfer are focusing primarily on the first year. And another college that has been in it for quite a long while, Mount Royal, has really been primarily offering one year. We've been offering two years now for quite some time.

He did not believe that the present proposal for degree granting capability reflects the original historical view that Red Deer Junior College would of course become a university.

The community view is clearly "not to forsake what the college is now doing." The President felt there was a lot of community support for the present community college operations, and that there would be great community objection to any attempt to change the college mandate, goals, or nature of the institution. The community supports degree granting capability as a response to increasing access to university education.

Selected degree granting capability was seen as a potentially feasible model for Medicine Hat College in the future, once brokered programs have been established, and the degree awarded is established as a credible degree in the community. The Board of Governors Brief (1985) states

> Even if there were a legislated mandate for public colleges in Alberta to offer degrees ... there would be a period of time required to establish the credibility of degrees offered by four year colleges. Were we to work with an established university for a number of years, during which time the university, not the college, offered the degree, set the standards, and hired the staff, the question of credibility could be reduced to a marked degree. (p. 2)

The President of Medicine Hat College stated the process of seeking degree granting capability should occur in two steps in order to ensure credibility in the degree offered:

> We think by establishing relationships with degree granting institutions, universities that exist at this time, we can provide the service to our clientele, and the degree that's made available to the will have credibility and standing.
>
> But in the long term we think that we could develop to the point that we could award some Medicine Hat College degrees in certain areas. It would certainly not be right across the spectrum, but it could be ... in Arts, Science, perhaps Nursing, Business, and perhaps even Fine Arts.

The Chairman of the Board stated that it is essential in the Medicine Hat community to initially "prove that [we can] offer a reasonable degree with the same acceptability as if you were actually in attendance on a university campus."

Economic Considerations

None of the colleges could support degree granting capability, or other forms of degree program provision within the college, without additional funding. The President of Medicine Hat College stated it would be impossible for that college to offer degree granting programs if additional funding were not provided. The Chairman of the Board, however, stated, that the Board would consider offering degree programs without additional funding. "It wouldn't be the first time this college has tried something without extra financial support. We'd take a serious look at it." The Chairman of the Board saw the funding of degree completion programs at the public colleges as "fairly economical because there is structure, administrative structure, a system in place here, so it means expansion of that system, but it is an add-on, not a totally new structure."

Funding would be required to extend the number of qualified staff, and to improve the resources necessary to support the program. The President stated they "have a large number of PhDs in various areas of the college, so we do have staff, but we would have to augment that with additional staff." A particular need for the college would be expansion of the library facility and its holdings in order to meet the needs of the baccalaureate degree programs. Medicine Hat College "is one of the few colleges that currently have some funding for research." The President stated the faculty is "keen on research," and would like to see the funding increased, providing more challenge, and more opportunity for faculty growth and development.

Additional funding would be required in order for Red Deer College to expand its programs to the degree level.

> The kind of dollars that in this past year have been given to Grant MacEwan and Mount Royal are substantial compared to what we were receiving for enrollment growth. If those kind of differences continue to exist, then what clearly would happen, is the financial pictures would be such that we should not be able to compete.

The President stated that Red Deer College has the lowest cost per FTE student in the province, and the organization has already stretched its resources to the maximum in accommodating students. Therefore, no further program development is possible without additional funding. The President pointed out that Red Deer College has the largest proportion of PhDs on faculty of any other community college in the province. If such funding were not available, Red Deer College would not proceed with its proposal to become degree granting. The College focus would then turn to lobbying the government to develop solutions to the access problem.

Grande Prairie Regional College did not believe it has developed the current university-transfer programs sufficiently to expand these programs to the degree level, even if additional funding were available for that purpose. Additional funding was seen as essential to build the two year programs. As noted previously, however, Grande Prairie would pursue degree program provision if other colleges in the system began offering such programs.

Neither Keyano College or Grant MacEwan Community College respondents believed that extension of degree granting capability is economically feasible.

Alternative Models for Increasing Provision of Baccalaureate Education

Development and funding of other models of extending undergraduate degree programs other than approval of degree granting authority to the public colleges, was supported by all respondents. The majority stated that programs offered by the universities at the colleges were the most desirable and feasible alternatives.

Collaborative or Brokered Programs and Capstone Programs

The President and the Chairman of the Board of Keyano College were particularly positive about the Capstone model, providing degree programs at Keyano College in conjunction with Athabasca University.

> The students take our Business Administration program for two years, in third year, they take Athabasca University courses on campus delivered by instructors, and in fact acquire an Athabasca University degree. We can do that in General Studies as well ... We have what is a unique model here, which I think is going to capture the interest of other educational institutions. Certainly the department is very interested in its progress, and have funded it. So there is an alternative.

The President stated the official position of Grande Prairie Regional College was to pursue brokered degree programs in selected areas from the existing universities. This position was based on a belief that this model would provide the most flexible way to meet the needs and demands of the prospective students, and was most feasible given the present state of development of the college. The college had based its decision to pursue brokered degree programs on its assessment of what is feasible in Alberta. The President believed that "brokering is the expedient way to get degree completion programs in this community at this point in the community and colleges' development, and in the system in Alberta."

However, if a decision were made to grant degree granting status to public colleges, and funding were available, the President stated that Grande Prairie Regional College would pursue such status, despite the belief that the college is in no way ready to assume such responsibility.

The President believed that brokering may be a first step to obtaining degree granting status for the college.

> I think some people are dreaming that it could result in our own degree granting status, but, I think everyone's aware that it depends on our population base; it depends on building our university-transfer programs beyond where they are now ... if we can get brokering in here, that will be a major step.

Brokering degrees, or other forms of collaborative arrangements, particularly with the University of Lethbridge and the University of Alberta, was the preferred model for extension of degree granting capability at Medicine Hat College. A proposal to pursue such arrangements had been approved by the college Board of Governors. This type of degree programming was seen as most feasible by the Board as:

> At this time there is little enthusiasm on the part of the government to expand existing postsecondary education facilities. Thus seeking legislative changes and major funding initiatives would likely not meet with success. The brokering proposal would require additional funding, but at a relatively modest level compared to that required for degree granting status. No new legislation would be required. The expansion and extension of our facilities and programs could take place in a systematic evolutionary manner, a process that is constantly sensitive to the needs of the community and to the resources of the cooperating institutions. (Medicine Hat Board of Governors, 1985, pp. 2-3)

The President of Red Deer College stated that "Red Deer College would rather broker degree programs than become degree granting in its own right." Grande Prairie, Medicine Hat, and Red Colleges were insistent that such programs must be provided by the traditional universities as well as Athabasca University.

Economic Considerations in Brokered Programs

Brokering programs was seen as a far more economical way to offer degree programs than by creating new programs or new institutions. The President of Grande Prairie Regional College stated that both economic efficiency and effectiveness could be maintained if arrangements were made to share library and human resources between existing institutions.

Expand University Capacity

The Chairman of the Board of Keyano College suggested the best solution to the transfer problem was to provide more places at the universities. "If the province accepts the fact that U of A and U of C are large enough, maybe the University of Lethbridge should grow, maybe there should be another university." This alternative received little support from, or was not mentioned by, the other respondents.

Create a Fifth University

The only way the President of Grant MacEwan Community College believed degree granting capability should be extended is through creation of a new university. He stated the college would be more than willing to assist such a new institution in development.

The President of Keyano College did not believe there was a need to create additional universities in the province. He believes given the population base, and the existing four universities, that the province is well served. He had a strong preference for restructuring the system to provide alternate ways to obtain undergraduate degree education, other than residency at the traditional universities.

The President of Medicine Hat College believed an additional possible model was creation of a fifth university to be located in an area outside of, but close to, the major centers.

> I don't think there's much enthusiasm for that at the moment, but one could say, let's select a site somewhere in central Alberta and establish another university. A populated area that's not too far from the major centers. So I think that's a possibility, but I haven't heard it discussed in any form.
>
> [But then] why create a new institution, when facilities and people already exist?

The President Of Red Deer College believed that in the far distant future there might be a need for a fifth university in the province. Red Deer College would not be interested in becoming that university.

Change the Mandate of Athabasca University

The President of Medicine Hat College, and the President of Grant MacEwan Community College stated that Athabasca University must clarify its mandate before the credibility of its degrees can be improved.

> Athabasca University may be the long term answer, but until Athabasca University can evolve credibility for its degree, where their degree is perceived as being as good, if not better, than that of the traditional universities, the demand will exceed the supply. (President, Grant MacEwan Community College)

The President of Medicine Hat College also stated some of the needs for a fifth university would be reduced, if a residential component were added to the distance education mandate of Athabasca University. No other respondent addressed this suggestion.

CHAPTER SUMMARY

This chapter has presented the interview responses of the individuals representing the selected public colleges. The responses are reported according to the identified data categories, which reflect the research questions. The remainder of this chapter summarizes the areas of agreement and disagreement of the respondents for each category.

What is the Demand for Baccalaureate Education?

All college respondents reported there was an increased demand for university education, and particularly baccalaureate degree programs in their regions. There was a common belief that the postsecondary educational system in Alberta should respond to this demand for university education by increasing the provision of undergraduate degree programs in the province.

Applications to the university-transfer programs in the colleges represented in the study have shown a significant increase over the past few years. This increase in applications was not anticipated by the Alberta Department of Advanced Education in its 1980 projections. Even with the expansion of all university-transfer program enrollments in the selected colleges in 1988, the number of applications to these programs exceeds the resource capability of the colleges to meet the demand. This level of demand was projected by all respondents to increase in the future.

The increasing demand for undergraduate degree programs was seen as reflecting a changing Alberta society. The development of an information-based economy requires individuals to be initially educated at higher levels than previously, and requires individuals to seek continuing education at higher levels to maintain the required knowledge and skills for jobs and positions. Participation rates in university education were believed by all the respondents to have increased for the eighteen to twenty four year old student groups, and to have increased markedly for adult students over the age of twenty-four.

The rising interest and participation in university education were seen as demonstrating an increased social value attached to postsecondary education, particularly in terms of ensuring success in a career. Only the respondents for Keyano College expressed a belief that the demand and participation rates for university education is in part linked to the economy of the province. The remaining respondents expressed their belief that the participation rates reflect an worldwide trend of increasing participation in postsecondary education.

The increased general education levels in society, and the successful provision of university-transfer and career-oriented programs in the community colleges for a number of years, was seen to increase the demand for complete degree programs in the regional areas. A growing demand for provision of university education in smaller, teaching-oriented institutions was reported by all respondents. The impact of the changes in student demographics, particularly the increasing numbers of mature students seeking further postsecondary education on public perceptions of reasonable access, was stressed by all respondents.

Regional Perspectives on Access to Baccalaureate Education

Increasing the regional availability of complete baccalaureate degree programs, both to meet regional needs and to decrease the enrollment pressure on the universities, was seen as necessary by all respondents.

Medicine Hat respondents believed the considerable distance between the city of Medicine Hat and the existing traditional universities increases the perception of individuals in the region that there is inequitable access to degree programs in the province. Two years of university-transfer education in the college was not seen as sufficient to meet the current demand and need for baccalaureate education in the Red Deer region. The respondents from Grande Prairie College, and Keyano College believed there are strong benefits for younger people who obtain their final years of baccalaureate education at one of the existing traditional universities; but this does not reduce the need for some provision of baccalaureate programs in the community.

A definite need to provide complete degree programs in the outlying regions, in order to meet the needs of mature students in these areas was identified by all respondents. These mature students are seen as unable to leave their home communities to attain university degrees, due to career, personal, and financial constraints.

Population pressures in the major urban centers were seen to create access problems in the cities. Increased provision of complete degree programs outside the major cities, was seen as a logical way to reduce the enrollment pressures on the universities, as well as increase the equality of access to such programs.

Perspectives on University Choice

Regional location appears to dictate which university students will attend regardless of the availability of placements in particular programs in each university. Students in Medicine Hat apply to the University of Calgary first and then the University of Lethbridge. Students in Red Deer, Grande Prairie, Fort McMurray, and Edmonton apply almost exclusively to the University of Alberta. Views of appropriate access, and credibility of programs offered by and through the colleges, were seen as linked to the provision of, or acceptance of, such programs by the "regional" university.

Residency Requirements of the Universities

The existing residency requirements of the University of Lethbridge, University of Calgary, and University of Alberta, and the similar restrictions in Athabasca University degree programs were seen by all of the college respondents as creating unnecessary obstacles for students and particularly restrict the participation of adults who require access to part-time studies. Such residency requirements were seen as outdated, and as having little validity in terms of maintaining quality in baccalaureate degree programs.

Are There Sufficient Numbers of Degree Granting Institutions in Alberta?

There are distinct differences in the perceptions of the respondents as to the adequacy of the present number of degree granting institutions in Alberta. The President of Grant MacEwan Community College believed that the approval of the university-transfer program at the college, together with further expansion, will meet the needs for university education in Edmonton in combination with the existing universities. He does believe, however, that there is a need for more degree granting institutions in the province to meet the needs in other areas. The respondents for Keyano College and Medicine Hat College believed there are adequate numbers of universities in the province to meet the needs, provided that systems to accommodate the demand and deliver baccalaureate education in the outlying regions are developed.

The President of Red Deer College did not believe that the present capacity of the universities, or expansion of the universities' capacity for enrollment, will be sufficient to meet the needs for baccalaureate program access. The President of Grande Prairie Regional College believed that baccalaureate education must begin to be offered outside of the universities, due to the increasing demand for baccalaureate degrees as the "job entry" credential.

Is Access Affected by the Current Controls on University Enrollments?

The respondents from Red Deer College, Medicine Hat College, and Keyano College all expressed their concern with the plans to control undergraduate enrollments at the University of Alberta and the University of Calgary. The outcome of such control of enrollment was seen as directly limiting access to university programs. The President of Grant MacEwan Community College believed that the increased tendency within these two universities to establish student quotas in undergraduate programs will create additional access problems. The President of Grande Prairie Regional College did not believe the control of enrollments at these universities has had an immediate effect on access, but believed reduced access may be a future outcome.

None of the respondents discussed enrollment capacities at either the University of Lethbridge or Athabasca University.

How Do College University-Transfer Programs Foster Access?

The present university-transfer programs were seen to provide access to those students unable to meet the increased entrance requirements at the University of Alberta; to students who require a smaller, teaching-oriented institutional approach to initial baccalaureate education than the traditional universities can provide; and to provide a transitional approach to university for adult students who have been upgrading their basic high school education at the college. These advantages of college provision of university education were seen as major reasons for extending university program provision in the college, in order to more effectively meet the needs of prospective students.

Will There Be A Transfer Crisis?

The respondents from Grant MacEwan Community College, Red Deer College, Keyano College, and Medicine Hat College stated that in 1990 there will not be sufficient places in the universities to accommodate transfer of the present numbers of college university-transfer program students. The President of Grande Prairie Regional College did not believe a transfer crisis will occur in 1990, but did believe transfer could become a problem later in the decade.

All respondents emphasized their belief that college university-transfer students must be guaranteed that they will be able to complete their degree programs in Alberta. Some form of government intervention to resolve this issue was seen as necessary. Failure to resolve the transfer problem was seen as likely to result in increased pressure for degree granting capability to be granted to the public colleges.

Access to Degree Programs Through Athabasca University

Athabasca University programs were not viewed by the majority of the respondents as an optimal mechanism for achieving university education; and these respondents believed that most members of their communities do not view the Athabasca university degree as being as valuable or credible a degree as an undergraduate degree from the other provincial universities. The respondents for Keyano College did not share this point of view. Part of the issue with Athabasca University programs may be the lack of community awareness of the programs, and the program requirements for completion of these degrees.

The President of Grant MacEwan College also pointed out that there may be some inequity in degree program provision, given that at present, residents in outlying communities are almost entirely restricted to Athabasca degree programs, unless they are willing to relocate.

Willingness of the Present Universities to Provide Off-Campus Programs

A very limited number of off-campus degree programs were being offered by the Alberta universities in the college regions. Primarily, Master of Education, and distance Baccalaureate in Nursing programs were being provided in this format. Keyano College and Athabasca University had successfully implemented the Capstone model programs for baccalaureate education at Keyano College leading to baccalaureate degrees in Arts, Business Administration, or General Studies. All colleges with the exception of Keyano College and Grant MacEwan Community College were pursuing collaborative program arrangements with the existing universities to extend the off-campus provision of undergraduate degree programs, but no respondent was assured that such programs will be implemented.

Red Deer College had been attempting to obtain off-campus programs at the baccalaureate level, primarily through negotiations with the University of Alberta for several years. The President concluded that the two major universities were not willing to provide this type of alternate program. Athabasca University had been very interested in providing degree programs at Red Deer College, but the President stated there was no student interest in these programs.

Grande Prairie College formally negotiated provision of baccalaureate degree courses at Grande Prairie with Athabasca University, but was unsuccessful in having such courses implemented. Issues of funding, program control, and instructional qualifications seem to have been a major problem in this attempt.

Perspectives on the Quality of Current Baccalaureate Degree Programs

University Degree Programs

A common perception encountered within the communities was that the major universities are not providing a quality baccalaureate degree. Factors seen as decreasing the quality of such programs are: the size of the universities, and undergraduate classes in those institutions; the role of graduate students in teaching undergraduate classes; and the focus on research in the universities. There was some feeling in the colleges and their communities that at least the University of Alberta, and likely the University of Calgary, no longer view undergraduate education as a priority, and that further reduction in quality of programs will occur.

The requirements that students attend classes on-site for at least a portion of the undergraduate degree programs offered by the universities was believed to be an outdated concept by most respondents. Differences in opinion exist as to whether exposure to the research-oriented equipment, libraries, and general atmosphere at the universities is necessary in undergraduate education programs.

College University-transfer Programs

Red Deer College, Medicine Hat College, and Grande Prairie College respondents felt strongly that quality baccalaureate programming is and could be better provided by the colleges due too their focus on teaching, their maintenance of small classes, and their proven record of success in preparing university-transfer students. The Presidents of Grant MacEwan College and Keyano College stated these college also do an excellent job of the two year university-transfer leading to student success, but had no wish to offer third or fourth year.

Research and Baccalaureate Education

The need to have faculty in baccalaureate education programs actively involved in research activities was another point of controversy among the respondents. The focus of the community colleges on teaching rather than research was seen by the President of Red Deer College and Grande Prairie Regional College as an advantage in providing quality baccalaureate education. The Presidents of Medicine Hat College, Keyano College, and Grant MacEwan College seemed to believe that research by faculty was essential to quality in baccalaureate programs.

Required Faculty Qualifications

All respondents stated that faculty qualified at the PhD level is essential in providing quality baccalaureate programs. Only Keyano College reported difficulty in recruiting individual faculty at this level of preparation; all respondent colleges had been encouraging staff in the university-transfer programs to obtain such qualifications.

Perceptions of the Roles and Mandates of Postsecondary Institutions

Community Colleges

All college respondents believed that the community colleges in Alberta are a "success" in meeting the postsecondary educational needs of their communities. All respondents firmly stated that the community colleges should reflect the needs of their community, and that the provision of both university and non-university postsecondary educational programs must continue.

Differences in opinion existed as to whether programs offered solely by the community colleges should include programs longer than two years in length, particularly in terms of programs leading to baccalaureate degrees. Regional and institutional differences; differing philosophical beliefs regarding the mandate of community colleges, and varying beliefs concerning the correlation of degree granting status with university status formed the basis for these differences in perspectives.

Universities

The role of Athabasca University in provision of baccalaureate education in the communities was accepted as one alternative way to meet community needs by the respondent colleges, but was only accepted by Keyano College as the most effective mechanism for provision of baccalaureate degree programs in the colleges. The roles of the the three traditional universities -- University of Lethbridge, University of Calgary and University of Alberta -- were clearly seen by all respondents as provision of both undergraduate and graduate education, and participation in major research activities; differences of opinion exist as to the adequacy of undergraduate program provision by these institutions. Several of the respondents suggested that the role of the two major universities, that is the University of Calgary and the University of Alberta, might be more effective if these institutions concentrated their activities on graduate programs and research.

Private Colleges

The Private Colleges in Alberta were not seen by the college respondents as an alternative route through which students could obtain a baccalaureate degree. These colleges were either not mentioned by the respondents in their discussions; or were described as meeting the needs of only a few, select groups of students, and therefore had limited effect on access to baccalaureate education.

Desirability of Extending Degree Granting Capability to the Public Colleges

Extension of degree granting authority to allow the public colleges to grant a limited number of baccalaureate degrees was seen as desirable, or potentially desirable, by three of the five college respondents, and in exceptional circumstances, desirable by a fourth college respondent. Such extension was seen as completely undesirable by the fifth college respondent.

None of the respondent colleges were interested in becoming a university, that is, an institution offering solely degree granting programs. A major difference of opinion existed between the colleges interested in limited degree granting status, and those who were not, as to whether or not addition of degree granting status results would eventually result in loss of the non-university programs currently forming the majority of programs in the community colleges.

The three colleges whose respondents viewed extension of degree granting capability as desirable were proceeding in somewhat different way to create an atmosphere to foster implementation of such a policy. Red Deer College was actively pursuing authority to grant degrees in a limited number of baccalaureate degree programs. The stated intent was to develop Red Deer College as a "University College" which offers both degree and diploma programs. Medicine Hat College was pursuing brokered or collaborative degree program provision at the college by the existing universities as a first step to degree granting authority for the college based on a belief that the feasibility of offering undergraduate degree programs, and the credibility of degrees offered through such programs, must be established before the college offers its own degrees. Grande Prairie Regional College was not seen by the President as sufficiently well developed to offer degree granting programs through its own resources at this time. Therefore collaborative programs which specifically relate to the college interests and resources were being pursued.

Distinct differences in viewpoints about facilitating undergraduate degree programs in the colleges also existed among the respondents for the two colleges who believed extension of degree granting capability was undesirable. Keyano College was continuing the Capstone program in conjunction with Athabasca University, and was interested in facilitating further collaborative or brokered programs offered by other universities. Obtaining degree granting capability for college programs would only be pursued by this college, if the entry requirements for a particular career were raised to a baccalaureate level; the college presently offered a diploma program in that career area; and the community and college resources and facilities could accommodate such an expanded program. Degree granting capability for undergraduate programs in general was not seen as desirable at this college. The President of Grant MacEwan Community College was completely opposed to degree granting capability being authorized for the public colleges for any program. In addition, there was no discussion of brokered or collaborative programs being offered at this college, primarily based on the philosophical belief that colleges are two year program institutions.

Desirable Degree Programs

A common view of the types of degree programs needed in the communities existed among the respondents who were interested in extending degree granting capability within the college, or in facilitating provision of undergraduate degree programs in the college. These program were Arts, Science, the Humanities, Business Administration and Commerce, Education, Nursing, and Social Work. The specific degree programs sought varied slightly based on assessments of community and college resources and facilities.

No college respondent expressed an interest in offering collaborative professional degree programs, or programs above the undergraduate level.

What Effect Would Degree Granting Have on College Operations?

The history of development within the college, the structure and climate existent in each college, the resource capability, and philosophical beliefs about university level education appeared to be major factors affecting the respondents' perspectives regarding the potential effect of degree granting capability on college function.

College respondents who stated that general extension of degree granting capability to the colleges would have very limited or no impact on the college, its climate, or effective functioning were all located in the three colleges which have offered university-transfer programs for the longest time. In fact, these colleges were all initially established as Junior Colleges. The majority view of the faculty and board members in these colleges was believed to be that university-transfer programming is a legitimate function of community colleges, and extension of such programming would not affect college ability to offer, or interest in offering, high quality non-university programming. All three colleges had encouraged and financially supported upgrading of faculty qualifications to enhance college capability to provide both university and non-university programs at the current or expanded levels. In addition, Medicine Hat College had initiated a mechanism to fund faculty research in order to encourage further faculty and program development.

The need for judicious management to ensure maintenance of comprehensive programming was emphasized by all three Presidents. Conflict and dissension which could affect the organizational climate and program quality were not seen as potentially critical or serious outcomes of extension of degree granting capability in these colleges. The Red Deer College President believed that due to the requirement that college faculty teach in more than one type of program, integration of faculty had occurred, and prestige and pecking order issues were minimal in the college. Medicine Hat and Grande Prairie College respondents stated that carefully considered implementation of degree programs would overcome any potential dissension within faculty. The President of Grande Prairie Regional College pointed out that all institutions have pecking orders based on the institutional perception of which programs are prestigious. Conflict and dissension are reduced through efforts to secure development of the acceptance of the legitimacy of all types of programs by the faculty. The President believed that such acceptance had been effected at Grande Prairie Regional College.

The two colleges whose respondents believed that allowing colleges to grant degrees would seriously disrupt the current college operations were representing the two colleges who were created specifically as community colleges rather than junior colleges. On a general level, both respondents from Keyano College viewed the addition of degree granting authority to the college as likely to disrupt the effective functioning of the college. A change in the focus of the college to university-level programming was seen as likely, resulting in loss or dilution of the service orientation and comprehensive programing offerings currently existent in the college. Both respondents believed addition of degree granting capability would eventually lead to conversion of the college to a university. The needs of the community were not seen as being met by a university. The resources required for the college to upgrade its present services, facilities, and to recruit staff necessary to implement such programming were seen as considerable and unwarranted. The likelihood of creating "mediocre" undergraduate programs was seen as high.

At Grant MacEwan Community College, the President stated that extending degree granting capability to the college would disrupt the priorities of the college, and could potentially affect its credibility and acceptance in the community. Specifically, degree granting capability would focus the college on university programming, resulting in both monetary and human resources being primarily directed to the university-level courses. A corresponding decrease in the quality and availability of the non-university programs offered by the college would result. There was presently faculty dissension within the college regarding the legitimacy of providing university-transfer programming in a community college. There was a potential for establishment of a pecking order within faculty based on perceived prestige of programs. Extension of degree granting capability would increase the dissension, and could result in faculty conflict and loss of quality in programs and services. The ease with which the college is able to recruit faculty at the PhD level exacerbates the potential for conflict between faculty who wish to pursue university status for the college, and faculty who are definitely opposed to any further involvement in university level education.

Effects on the Postsecondary Educational System

Access to Postsecondary Education

The respondents of Red Deer College, Medicine Hat College, and Grande Prairie Regional College believed that extension of degree granting capability to the public colleges is one of many policy decisions which will be required to meet the need for equitable access to baccalaureate education in the province. A major factor in the desirability of extending degree granting capability was seen as the reduction in personal costs to potential students in the outlying regions who access these programs. Greater equity in access was seen as a positive outcome.

The respondents of Grant MacEwan Community College, and Keyano College believed that extension of degree granting capability to the public colleges will result in loss of access to non-university programs in the province, however, and thus produce greater inequity of access to needed postsecondary education than presently exists, particularly in terms of adult upgrading, and career programs at the diploma level.

Effects on Institutional Roles and Mandates

All college respondents reported some faculty and community disagreement as to the desirability of community colleges offering degrees.

One perspective reflected a traditional philosophy of the appropriate mandate and roles of community colleges. Community colleges were established as comprehensive non-university institutions, to offer multiple programs based on community need, and specifically directed to meet the educational needs of the population that cannot be met by universities. In addition, community college mandates are to provide two year programs in a wide variety of areas, including university-transfer, technology, career and occupational preparation, trades, academic upgrading, community education, and continuing education. Based on this philosophy of a community college, any extension of university program offerings beyond the two year university-transfer level was seen as inappropriate for a college to pursue.

This philosophy was firmly held by the President of Grant MacEwan Community College. The President and Chairman of the Board of Keyano College supported this perspective, but stated that extension to undergraduate degree level in career and occupational preparation programs was a legitimate extension of the role of a community college, if such qualification became mandatory for certification in the occupation. Underlying these perspectives on the mandate and roles of the community college was a belief that the college acceptance and credibility in the community is primarily based on the excellence and success of the present program structure, and the rapid employment or further education opportunities which occur following completion of the college programs.

The other three college Presidents and Board Chairmen stated they believed that community colleges were established to meet the basic post-secondary educational needs of their communities, and should not be restricted in type or length of program other than restriction to an undergraduate program level. The specific programs offered should be determined by the needs of the community, and the resources available in the community and college to support such programs. The unique role of community colleges was seen as provision of comprehensive programming including university undergraduate programs and courses (rather than restriction to transfer), technology, career and occupational preparation, trades, academic upgrading, community education, and continuing education. Continuing college ability to effectively meet both the educational and occupational requirements and needs of the community was seen as essential to maintain college credibility within the community.

The views of the communities and individual college personnel may also reflect a belief that universities are more prestigious, or will better meet the social and economic needs of society than will colleges. None of the respondents believed this was a predominant view in any college or community.

Economic Desirability

The respondents of the three colleges most interested in extending degree granting capability stated extension of degree granting authority to the colleges is more economically desirable than creating new degree granting institutions. In addition, greater social and economical benefits to the communities in which the colleges are located were seen to be likely outcomes of such program provision.

The Keyano College and Grant MacEwan College respondents, however, believed that the costs of extending degree granting authority to the colleges would be "enormous," and the rationale for such extension cannot be economically or politically justified.

What Quality of Degree Programs Would Be Offered in the Colleges?

Keyano College respondents were the only college representatives to express concern with potential reduction in quality of undergraduate degrees if degree granting programs were offered by community colleges. The limited resource base in the college and the inability of community colleges to create an academic atmosphere, were seen as likely to lead to mediocre undergraduate experiences and mediocre degrees.

The Grant MacEwan Community College President expressed no opinion on this issue. The remaining colleges felt their proven effectiveness in providing quality undergraduate education in the first two years of degree programs would continue if the third and fourth year of the program were implemented. A strongly emphasized point was that no program would be extended in these colleges unless the college felt assured that quality would continue. Quality of programming was seen as being directly related to expansion of existing library resources and facilities.

Ensuring that degrees offered at the colleges have credibility with the public and other degree granting institutions was of concern in Grande Prairie, Medicine Hat, and Keyano College.

Need for Faculty Research to Maintain Quality

The President of Red Deer College stated that the college would not change its emphasis on teaching if baccalaureate programs were offered in the college. Any research done would continue to be of an applied nature and would have "a lower priority than teaching." Medicine Hat College presently encourages research activities by its faculty, and the President stated such activities should be expanded if baccalaureate programming were offered by the college. No other college respondents expressed a direct opinion on this issue.

Feasibility of Extending Degree Granting Capability to the Public Colleges

The only college respondents who believed that extending degree granting capability was currently feasible in Alberta were those representing Red Deer College. The President of the college stated that this solution was particularly feasible in Red Deer due to the level of staff development, the length of time Red Deer College had been involved in university-transfer education, and the demonstrated level of community support for degree granting at Red Deer College. Degree granting capability in the public colleges was seen as reflecting current models in other countries and provinces in Canada. The Colleges of Advanced Education in Australia and four year institutions offering both degree and diploma education in the United States and Europe were seen as successful models through which such capability could be extended. The University College model in British Columbia was pointed out as another obvious model which could be examined, as well as models being developed in Ontario and at Miami-Dade Community College in Florida. Overall, the establishment of undergraduate institutions offering both baccalaureate degree and diploma certification in other provinces, and other institutions was seen by the President as increasing the feasibility of creating such institutions in Alberta.

The President of Medicine Hat College believed that a policy decision in the next decade to extend degree granting capability to the public colleges would be feasible, and could be the most viable solution to meeting the demand and need for baccalaureate education in the province. In a brief presented to the Board of Governors at Medicine Hat College, the need to establish the credibility of any complete degree programs offered in the college prior to the college granting its own degrees was emphasized.

The President of Grande Prairie College stated the feasibility of implementation of this solution varies because of the significant regional disparities in the province. Less need for increased access to baccalaureate education was seen to exist, and therefore, this solution was seen as least feasible, in Calgary and Edmonton.

The Keyano College respondents did not see this policy solution as feasible due to cost factors, practicality of implementation, the implications for the postsecondary system, and the potential for "marginal" degrees.The President of Grant MacEwan Community College stated that such a policy decision is not acceptable, and in fact "may be dangerous." He believed that the only feasible decision would be to create additional university institutions in the province.

Economic Feasibility

All respondent colleges would require additional funding in order to offer complete degree programs. Funding would be required to extend the number of qualified staff, and to improve the resources, primarily library facilities and resources, to support the program. The President of Medicine Hat College also saw a need for increased funding to meet the needs for faculty research to enhance baccalaureate program provision.

The respondents from Keyano College and Grant MacEwan Community College saw the cost factor associated with extension of degree granting capability in terms of funding additional library facilities, classroom and laboratory space, and faculty as economically not feasible.

Political Feasibility

All college respondents believed the political feasibility of extending degree granting authority would be enhanced if the present universities were unable to accommodate the numbers of college university-transfer students.

The majority of respondents stated that a policy decision to extend degree granting capability to the colleges would receive local community support. The President of Red Deer College believed Alberta is an entrepreneurial province which expects and supports creation of new ways of providing services to meet established needs. The respondents from Medicine Hat College believed however that the existing universities, and their constituents, may resist such a policy decision.

The President of Grande Prairie Regional College and the respondents for Keyano College did not believe that extension of degree granting capability to the public colleges is feasible in the present political and economic environment in Alberta. Innovative and creative methods of providing university programs controlled by the universities was seen as a more feasible solution. However, if a decision were made to allow other public colleges to grant degrees and funding was provided, at least Grande Prairie College would pursue such status.

The President of Grant MacEwan Community College believed that extension of degree granting capability to the colleges would result in increased community pressure for creation of "new" community colleges to meet the needs for non-university postsecondary education.

Ability to Recruit Qualified Faculty

Keyano College was the only college which anticipated difficulties in recruiting and retaining appropriately qualified faculty to offer complete degree programs. The President of Red Deer College saw degree granting capability as particularly feasible in Red Deer due to the large numbers of faculty prepared at the PhD level presently on staff at the college.

Mechanisms for Implementation of Degree Granting Authority

The President of Medicine Hat College stated that degree granting authority for the colleges could be implemented in an effective, equitable manner, if the mandate of the Private Colleges Accreditation Board were expanded to include the public colleges. All other respondents emphasized that implementation of this policy solution would require both institutional and governmental negotiations, and establishment of cooperative mechanisms.

Alternative Models for Increasing Provision of Baccalaureate Education

Collaborative, Brokered, and/or Capstone Models

All of the college respondents, with the exception of Grant MacEwan College, believed the most desirable and feasible way to increase access to degree programs was through provision of the senior years of baccalaureate programs or complete baccalaureate degree programs by the existing universities at the regional colleges. These programs were described as brokered, extended campus, or capstone arrangements. Such program arrangements were the preferred model for extension of degree granting programs in all colleges outside Edmonton, including Red Deer College. There was a concern that such program arrangements not be limited to provision by Athabasca University. The Grande Prairie Regional College President reflected the other respondents in her statement that the college wished to arrange brokered programs in selected areas through negotiations with each of the universities, based on the college assessment of the "best" university to offer each degree program. In this way, the college President believed maximum flexibility in degree program provision could be negotiated, and student needs and demands could be met.

Feasibility of Collaborative Programs

The negotiation of collaborative program models with the existing universities was believed to be the most feasible way to extend degree granting program availability at the current time by all respondents from the colleges. The brief to the Board of Governors at Medicine Hat (1985, p. 2) suggests that establishment of such programs, in which "the university, not the college, offers the degree, sets the standards, and hires the staff" will directly reduce any problems with degree credibility. Development of this type of program was seen to require relatively small amounts of additional funding compared to the funding required to allow colleges to grant degrees; and would allow implementation of such programs in "a systematic evolutionary manner ... that is constantly sensitive to the needs of the community and the resources of the cooperating institutions" (pp. 2-3).

Expand Existing University Enrollment Capacity

The respondents at Keyano College suggested the best way to address the rising demand for baccalaureate education and the projected transfer problem was to increase the number of places at the existing universities, and perhaps particularly at the University of Lethbridge. In this way, the quality of baccalaureate programming and the credibility of degrees awarded was seen to be best maintained. This option was also supported by the President of Grant MacEwan College, although the feasibility of such expansion, particularly at the University of Alberta, was questioned. The other respondents emphasized that this may not solve the problem of the particular needs of individuals in the regional areas in terms of ability or desire to gain access to the traditional universities.

Create a Fifth University

The President of Grant MacEwan Community College believed this was the only desirable and feasible way to meet the rising demand for baccalaureate education. Such a university could be created from an existing college, or created as a new institution. If such a university resulted from a conversion of a community college to university status, creation of a new community college was seen as essential by the President.

No other college respondent supported this policy option as a solution in the current postsecondary environment. In particular, no college respondent viewed conversion of any of the public colleges to a university as a feasible or desirable way to meet the demand for baccalaureate education. All respondents believed that community college provision of a wide variety of educational programs and services is essential to meeting community needs.

The Presidents of Medicine Hat College and Red Deer College noted creation of a fifth university is a possible future model but not one that was being seriously discussed. The President of Keyano College stated there was no justification, based on population, for an additional institution. Both the Presidents of Medicine Hat College and Keyano College stated that utilizing the currently existing facilities and people in the community colleges to provide baccalaureate programs was a more feasible alternative to meeting the demands for baccalaureate education.

Expand the Mandate of Athabasca University

The respondents from Medicine Hat College, Grant MacEwan College, and Grande Prairie Regional College stated that Athabasca University must clarify its mandate in order to more effectively meet the needs for baccalaureate education, and to increase the community perceptions of the credibility of the Athabasca University degree. The President of Medicine Hat College also stated consideration could be given to adding a residential component to the distance education mandate at this university, and in this way, perhaps meet some of the demand for an additional "residential" university. Overall, provision of regional baccalaureate programs by Athabasca University was seen by all respondents as only one method through which undergraduate program extension could or should occur.

CHAPTER 6

PERSPECTIVES OF THE UNIVERSITY AND DEPARTMENT OF ADVANCED EDUCATION RESPONDENTS

This chapter provides a detailed description of the responses to the questions asked during interviews conducted at each of the four universities in Alberta. A summary of the major findings follows this description. The detailed responses to the interview conducted with the Deputy Minister and Assistant Deputy Minister, Policy and Planning, of the Alberta Department of Advanced Education forms the final section of the chapter.

PERCEPTIONS OF UNIVERSITY STAKEHOLDERS

This section is based on the responses to interviews conducted between May 27 and July 7, 1989 with representatives of Athabasca University, the University of Alberta, University of Calgary, and University of Lethbridge.

Demand and Need for Increased Provision of Baccalaureate Education

The respondents from the universities all agreed that the demand for baccalaureate education in the province was increasing and would continue to increase. Conflicting opinions existed as to whether there was a need to increase the numbers of graduates from such programs, and therefore the number of programs throughout the province, or if the demand is related solely to providing programs in regions of the province presently not served in this manner, or, if sufficient data was yet available to determine the actual need versus the demand.

Socio-economic Factors

The demand for baccalaureate education was seen as based in the social value attached to, and the perceived link between, levels of education and career success within Alberta society.

> We're a considerably wealthier society than we were at the beginning of the century. We expect more for ourselves. The idea of sixteen or more years of formal education is not an unreasonable demand given the internal criteria of the country. (President, University of Lethbridge)
>
> The people in Alberta place a high priority on education. What I hear and read is that the people want to reach high educational levels ... this is demonstrated by the achievements of the populace, at least in Calgary. (President, University of Calgary)

There is a growing demand by employers for more highly educated people in the work force; and, by adults who wish to raise their level of education in order to maintain job security and career advancement. The level of demand was seen by some of the respondents as creating a need to increase the numbers of baccalaureate graduates in the province. Others questioned if the demand for such programs really indicates a societal need for individuals educated at that level.

> I think that people are seeing that education is something that gives them an economic footing in this society. There is a demand ... in a sense I suppose we do need more places.
>
> I don't know how much demand there really is out there. We know that people are accessing education programs, but do we have a demand for baccalaureate trained persons in particular areas? I couldn't say for sure. (Associate Vice-President [Academic], University of Alberta)

The Presidents of the University of Alberta and University of Lethbridge stated that a need exists, given the discrepancy between the number of qualified and interested people, and the capacity of the universities to enroll these individuals in programs. In addition, the Presidents of the University of Calgary and the University of Lethbridge stated that an increased number of baccalaureate graduates is essential to maintain Canadian society, and to maintain Canada's competitive edge in the international marketplace. Although the President of Athabasca University did not disagree with these opinions, he did believe that the need for such education existed in the regional areas of the province which do not contain universities. He did not believe there was a need to increase the numbers of graduates from the urban universities.

> The question is not so much whether if the University of Alberta doubled its enrollment, would that solve the problem? The problem has to do with the people in Red Deer or Fort McMurray wanting to start and complete degrees in their own communities. They don't want to go to Edmonton.

Is There a Need to Increase Regional Provision of Baccalaureate Programs?

All respondents supported regional provision of baccalaureate programs provided by existing university institutions. None of the respondents supported creation of degree granting programs in regional areas which were not linked in some way to the universities in the province.

The President of Athabasca University stated. "There must be a point where the overall capacity of the system must govern what is considered reasonable access to degree programs." The pursuit of degree programs in the regional areas is based on attitudes which he described in this way:

> Everyone pays taxes. The people outside of Edmonton and Calgary pay taxes and want services in return. They don't understand why it is, when

> they pay taxes, that they can't have equity in service. Obviously, the reason for wanting equity in opportunity is due to the tremendous cost of obtaining a university eduction on a personal basis. If you move to Edmonton for a year, you're looking at a sizeable outlay in personal expenditure.

All respondents were concerned with the economic costs to the public and the threat to the quality of postsecondary education, if degree granting capability were to be extended to non-university institutions. The University of Alberta respondents stated there are tremendous similarities between the requests for degree granting institutions, and the requests for a "hospital in every community" which were acceded to by the government in the early eighties.

> Once there is the facility of a hospital or of a university, the expectation is that we will have those programs that are available elsewhere. Sheer reality is that we cannot offer every program in every small institution. That means you cannot possibly have a medical school in every community. You cannot even have an education faculty in every community. There are many things that are very costly, including good quality laboratories, high calibre staff, [and] providing opportunities to keep those people interested.

The major concern of all respondents was a need for the public to be aware that "the expansionist mode of the nineteen sixties and seventies is long past" (President, Athabasca University). As a result of the current need for cost-effectiveness in provision of postsecondary education, all respondents reported that creative and innovative approaches to providing regional degree programs must be explored fully prior to any consideration of further degree granting institutions.

Capacity of the Universities

Athabasca University has the highest enrollment growth rate of any university in Canada. Enrollments have risen from 4,028 students (in total) in 1981 to 11,000 students in 1988-89 (Alberta Advanced Education, 1988). Nearly all students undertake Athabasca programs on a part-time basis. The President stated that if the fiscal resources were available, Athabasca could probably accept "an enormous number of students," particularly if a multi-mode approach to degree program provision were adopted which involved both distance and on-site programming.

The University of Calgary had capped its enrollment at 20,000 students, including both undergraduate and graduate student enrollments. The President stated this capping was due solely to economic factors:

> The government seems to have the impression that the University of Calgary has capped its enrollment by choice, with respect to a size factor. That's not so at all. The reason we have capped enrollments is that the Board and General Faculties Council felt, because of the dropping per student grant, the time had come to indicate that we cannot function unless the government is prepared to put in adequate resources.

The President stated that with increased resource provision, there would be no reason why the University of Calgary could not expand to a total student enrollment of 25,000 to 30,000.

The University of Lethbridge had enrollment places available, particularly in the third and fourth year of their programs. The enrollment at the University of Lethbridge was 3100 students, and the President stated this enrollment could be increased to 4500 to 5000 students if funding were provided.

The President of the University of Alberta, however, believed "more university places are needed in the province, and no matter what the extent of expansion in the universities, I don't believe the present universities can satisfy the needs in the foreseeable future." The President was very concerned, however, with the public perception of the published plans of the University of Alberta regarding undergraduate education at that institution:

> We will have 20,000 undergraduate students. Now that's more undergraduate students than all but a handful of universities in the country have .... There is no question we intend to decrease the number of undergraduate students but some people are speaking as if we intend to eliminate our undergraduate students. That's nonsense.
>
> We're going to have thousands of new students coming to us directly from high school; it's just that the plan is to have fewer than we had in the past. Not only are we going to have large numbers of undergraduates, we are going to continue to have undergraduates at the first year level. But the balance is going to change.

The President emphasized that the intent was to provide more placements in third and fourth year of the undergraduate programs, in proportion to the first and second year placements which could be decanted to the public colleges. In 1988-89, total enrollments at the University of Alberta decreased by 750 students. Transfer student enrollments in third and fourth year increased by 500 students, representing thirty four percent of the total enrollment.

Part of the capacity issue was seen by the Associate Vice-President (Academic) at the University of Alberta as related to the need to maintain smaller class sizes in third and fourth year, due to the intensive use of facilities required in these upper division studies. As such, further expansion was seen to be very difficult to implement without provision of funding at a higher level than that provided for first and second year studies.

Issues Affecting Perceptions of University Capacity

The President of Athabasca University stated that Athabasca University and the University of Lethbridge could satisfactorily meet the needs of transfer students in the Northern and Southern regions of the province "unless regional issues intervene in such accommodation of needs." The apparent disparities in enrollment within the existing traditional universities may illustrate the regional nature of this issue:

> For whatever reasons ... the University of Calgary and the University of Alberta are probably over run [with students], and Lethbridge has space in many areas. Alberta isn't a place where people say, "well, if I can't get into one, I'll go to the other." (Associate Vice-President [Academic], University of Alberta)

The President of the University of Lethbridge stated this disparity in enrollment reflects in part the community culture in Alberta. This culture dictates which institution is seen as the preferred institution.

> In some communities, students go directly to the university. In others they do not. For example, the majority of students in Red Deer go to Red Deer College, not to U of A or U of C. The majority of students in Medicine Hat go to Medicine Hat College. Such attitudes are a major underlying factor in perceptions of equitable access.

Part of the problem in determining the capacity of the universities for baccalaureate education was seen as "the lack of clarity as to the actual mandate of Athabasca University" (President, University of Calgary). Recognizing this concern, Athabasca University has developed a detailed proposal for Government to "clarify and extend the Athabasca University mandate for provision of baccalaureate degree education and limited masters' level education" (President, Athabasca University).

The University of Alberta was seen to be "very accessible and trying hard to be innovative in meeting the needs for undergraduate education" (Associate Vice-President [Academic], University of Alberta). Accessibility has been increased through non-matriculated entrance provisions; the "special admission" and quota directives for special groups of students (for example, native students); the acceptance of college transfer students with a sixty percent high school average directly into third year programs; and provision of off-campus degree programs. Despite this flexibility, the Vice-President (Academic) believed "we still have to say no to some students," based on the availability of resources and continued maintenance of standards and quality in programs offered.

Is There A Transfer Crisis?

The President of Athabasca University believed that a transfer crisis would occur in 1990 "because there will not be adequate places in third and fourth year of the traditional universities to accommodate the numbers of college university-transfer students who will successfully complete two years at the college by this date." The President of the University of Calgary concurred with this, stating "there will be a huge problem with transfer placement in September 1990, involving hundreds of students." Discussions had been held with the Department of Advanced Education but "no action has been taken as yet." The President was concerned that the college transfer "crisis" would "evolve into a political situation which will call for a quick fix. And that is not the way to go."

The President of the University of Alberta also reported a transfer problem but stated this problem was being addressed at many levels. In particular, he noted the change in funding for the University of Lethbridge, which supported a planned increase in undergraduate enrollments, as a particularly positive governmental attempt to address the issue. The Associate Vice-President (Academic), however, was not fully convinced that there would be a transfer crisis, as the data on the number of students who will actually want to transfer to the universities was not as yet complete.

The President of the University of Lethbridge agreed there was a coming "transfer crisis" in terms of lack of placements for college university-transfer students at the University of Alberta and the University of Calgary. As space existed at the University of Lethbridge, he believed "it is part of our obligation to take students in third and fourth year who come from the college structure." In addition, the University of Lethbridge was proposing to offer third and fourth year undergraduate programs in conjunction with Medicine Hat College and, possibly, Mount Royal College in an effort to address the transfer issue. These proposals were dependent on government funding.

Issues in the Transfer Problem

The President of Athabasca University stated the transfer issue is complicated by the variations in academic requirements for admission to first year baccalaureate programs (particularly at the University of Alberta), and the academic admission requirements for most college university-transfer programs. This viewpoint was shared by the Associate Vice-President (Academic) at the University of Alberta. The President of the University of Calgary, however, did not see this as an issue. He is a strong supporter of a "discretionary admission category," and as such believed differing high school average admission requirements should not be of concern.

A second issue seen by the President of Athabasca University was the trend towards establishment of quotas in the third year of the traditional university programs. He gave an example of a student who has begun a program at one of the universities and holds a sixty-five percent average in second year. A college student requesting entry has a seventy-five percent average in the second year of the college university-transfer program. Who should be admitted? The President believed "the obligation of the University will be to its own students." Quotas were being considered for third year undergraduate programs at both the University of Alberta and the University of Calgary.

> We have a crush in physical space and the number of instructors. We just don't have the space in Business and a number of other programs that [students] would like to get into. These programs must have some kind of standards and control of enrollment, in order to keep the quality of their programs high, and also for the credibility of the program itself.

> ...Particularly in quota faculties, we cannot admit as many students as we want. (Associate Vice-President [Academic], University of Alberta)

The Associate Vice-President (Academic) at the University of Alberta also stated there are critical system and institutional issues which contribute to perceptions of the transfer crisis.

> First of all, we have a group of autonomous institutions in this province. We are not a system of postsecondary institutions. We do not have an agreed upon system of grading; we do not have an agreed upon system of admissions; we do not have an agreed upon system of defining probationary status. We all want to set our own regulations on when our students will be admitted, how long we will keep them, when and how they should be removed if we so desire, and when and how they will be transferred in.

The colleges which have university-transfer programs are seen to want to maintain their own institutional autonomy, but "still want to be able to tell the university that we must admit their students."

The University of Alberta position was that there must be a balancing of transfer student rights and the rights of students already admitted to the University. The Associate Vice-President (Academic) did not see this balance in the arguments of the colleges presented in recent discussions.

> The transfer colleges have stated that they would like us to tell our probationary students ...that instead of keeping that student, we will take a college transfer student who might be a better student. The colleges also have probationary status, but they won't bump their own students in order to take students from another institution.
>
> You could say we are giving our students a worse deal out of it. First of all, they have to have a seventy percent admission average, and now we tell them if they do not have category A status, they cannot transfer programs, or continue in their original program?

A final issue seen was the need for the universities to maintain balance in their program offerings, and quality and integrity in all programs through control of enrollments and maintenance of standards.

> If we only enrolled students according to their [expressed] need for certain programs, one year we would be a business institution, the next year a nursing. How do you run a university on that basis? We need to have the integrity of our programs maintained as well as serving the need for access. (Associate Vice-President [Academic], University of Alberta)

Quality in Baccalaureate Education

A major concern of all the university respondents was that maintenance of quality in the postsecondary education system be as strong a consideration as access, in determining further development within the system.

> Access is the easiest principle to ascribe to, and every politician can subscribe to access without defining it. [That translates to] we must provide access to our institutions for all our young people, but also for all other people who want to go as well. What they forget to mention is the twin to access is access to quality education. (President, University of Calgary)

The major elements necessary for quality in baccalaureate degree programs were seen by all respondents as: an adequate library, "first class" faculty with PhD qualifications, a research emphasis in the organizational culture, and adequate financial support.

> Both economically, and from the point of view of stature -- and you have to look at stature beyond Alberta -- we've good reason to try to enrich the resources which the existing facilities offer. (President, University of Calgary)

The President of the University of Lethbridge stated that the entire Alberta postsecondary system must be rationalized in order to meet the rising need for undergraduate degree education, but the emphasis of such rationalization must be on quality. The need to prevent further duplication of costly programs was fully supported by the Associate Vice-President (Academic) at the University of Alberta. In addition, offering any degree program at smaller regional institutions, when "universities are rationalizing their programs with the intent of cutting out some" was seen as having no basis in logic.

The President of the University of Alberta stated that there is a common fear that the quality of education will suffer if institutions which do not offer a variety of programs, and which are not involved in research, begin to offer the upper level courses of an undergraduate program.

Issues in Maintaining Quality in Baccalaureate Programs

The Projected Shortage of "Qualified" Faculty

All respondents shared a concern with the present shortage of appropriately qualified faculty for existing positions in the universities, and the national projection of a severe shortage of such individuals over the next decade. "We're starting to fear now that with the projected output of Canadian graduate schools, it is going to be very difficult to meet the demands in the system in the early to late nineties" (President, University of Lethbridge). A common concern of the respondents appeared to be that the competition for staff would become so severe that quality of programs would begin to deteriorate.

The University of Calgary was seeking one hundred and twenty individuals to replace existing tenured faculty positions. The President stated that "the numbers game is going to be a very tough one for the next three or four years because the supply of PhDs in this country in certain areas is very limited." He believed many appropriately qualified people have chosen to work in business and other occupations, resulting in "a very small pool of people to work with as potential faculty members, at least those with top-notch qualifications." Suitably qualified people are more likely to seek positions with the existing universities. "So what are we talking about? Are we talking about hiring second class citizens for the colleges? No! That would be deadly!"

The University of Lethbridge was projecting a twenty percent faculty replacement over the next two years, that is, approximately fifty-four positions of a total of two hundred and fifty tenured staff. As well as a lack of numbers of individuals with PhD qualifications, the President was concerned with the difficulties in finding high quality individuals, particularly those with demonstrated research experience, for the current faculty requirements of the universities.

The Quality of University Transfer Programs

No problems were seen to exist with the quality of students transferring from the public colleges to the universities. All respondents reported that the available data provide solid evidence that community college university-transfer students perform as well in the third and fourth year of university programs as do students who begin their studies at the university. The President of the University of Lethbridge stated that community college students may in fact be better prepared in the first two years of university-transfer programs than are students at the universities.

> We've got good indications that college instructors can do somewhat better teaching in year one and two for whatever reasons -- we don't know what they are. Perhaps [it is] due to being smaller or being better suited to the level of student ... [given] the focus of first and second year degree programs on understanding introductory concepts and principles.

None of the respondents believed, however, that the success and quality of university-transfer programs can necessarily be carried over into third and fourth year. Third and fourth year of baccalaureate programs were seen as requiring involvement with faculty who are doing research in the particular discipline, in order to fully develop the student's knowledge of the field.

The Associate Vice-President (Academic) at the University of Alberta stated the quality of transfer programs may be directly attributable to the approval process which has existed both historically and currently in Alberta. This approval process has ensured that a high quality library is available to students, the content and organization of the particular course offered is appropriate, and the instructor qualifications reflect the standards of quality degree programs. This process has been a point of contention with the colleges, particularly in terms of instructor qualifications. Community colleges may believe that the University of Alberta do not see their programs as high quality programs. The Associate Vice President believed that this view could be heightened by the current transfer issue. Possible reasons for this belief in the lower quality of college programs were identified as the process of approval for transfer courses, the types of programs offered by the colleges in addition to university-transfer, lack of understanding of college roles by university staff members, and the distinct view of university faculty that colleges are "junior" because of the lack of research done within these institutions.

Research Activities in Degree Granting Institutions

All university respondents stated that research and scholarly activities by the faculty are necessary for high quality baccalaureate programs. The perception within Alberta that the teaching role of faculty is more important in baccalaureate programs than was the research role was of major concern to these respondents.

> The tradeoff people would like to think, suggests that as you increase research activities, the teaching provision goes down. I don't think so.

> I think that when you talk about quality, it's the balance of research and scholarly work and performance, and teaching -- unless that's there, there isn't quality in the system. With teaching provision alone, you're kidding yourself that over the long haul faculty are really performing at a top-notch level. (President, University of Lethbridge)

Research involvement in undergraduate programs was seen as necessary if these programs led to graduate study, as well as work entry qualifications. Given the projected need for increased numbers of PhD qualified individuals in Canada, both for university positions and for the industrial needs of the economy, "undergraduate programs should encourage development of individuals, but also provide the groundwork for development of expertise to the PhD level" (Associate Vice-President [Academic], University of Alberta).

Opportunities for staff to undertake research were seen as essential in provision of the most current knowledge. All respondents believed such "sharing" of research should be a major element in undergraduate degree programs.

> As you do research, it should reflect in your teaching and be on the cutting edge of knowledge, It doesn't guarantee a good teacher but it certainly has that option. (Associate Vice-President [Academic], University of Alberta)

> Higher education is a master-apprenticeship system, and if the master is not practicing the craft, he cannot teach the students about his craft and the way it evolved. He talks about how it used to be, not the way it is. If that's the case you will have an inferior degree. Now if you want to have a terminal degree at the age of twenty-two, this could be done; but recognizing what everyone is going to have to do to maintain themselves in a career until age sixty-five, I don't think this is what is wanted. (President, University of Lethbridge)

Maintaining the satisfaction of staff members qualified at the PhD level was also seen as highly related to opportunities for research.

Desirability of Extending Degree Granting Capability to the Public Colleges

None of the university respondents saw the approval of degree granting authority to the public colleges as a desirable solution to increased provision of baccalaureate degree opportunities in the province. The President of the University of Alberta defined the University position on this issue as:

> That we expand the involvement of the colleges at the first and second year level. We permit arrangements in particular fields that might result in an entire degree program being offered at a college but, if it is a university program, then the university must be involved.
>
> [The University] has not said anything about more institutions, or about a new kind of institution, let us say a University College, which isn't a university but has the authority to grant its own degrees in selected fields.

The President of the University of Alberta stated that the basic definition of a university is an institution which "has authority to grant at least one degree, tends to have a variety of programs, and is an institution involved in research." He did not believe that there could be an institution which had authority to grant degrees which wasn't called a university.

The Associate Vice-President (Academic) emphasized that the issue of extending degree granting capability to the public colleges was

> an issue which cannot just be talked about as creating a new institution or extending degree granting authority. It has all of the elements of what it means to be an Albertan and a Canadian. What values are accorded to education? Is education not something I should be able to guarantee to my child? It gets to the quick of some of these basic rights. We have to deal with those underlying issues in a very direct way.

The development of alternate ways to deliver courses to regional communities was seen by this respondent as the most effective way of meeting the regional demand for baccalaureate programs.

The President of Athabasca University stated his belief that the colleges are in disagreement with each other about the desirability of degree granting capability.

> I'm not so sure that they really even want to offer degrees .... I really think that the colleges which are now proposing to offer degrees will in the end be neither a good university nor a good college. I think it is a fundamental mistake.

The President of the University of Lethbridge believed the University of Alberta "may be in favor" of extending degree granting programs through some mechanism, in order to allow the University of Alberta to pursue further development of its graduate degrees. The President cautioned, however, that if degree granting capability were granted to one of the public colleges -- for example Red Deer College -- political demands would dictate that such authority be applied to other colleges, particularly Grande Prairie and Medicine Hat Colleges.

Can Quality in Degree Programs be Maintained?

A concern existed that the quality of education was not being considered in the question of extension of undergraduate degree programs. Quality relates to credibility of degrees obtained, and as such was seen as a crucial issue.

The respondents saw a high potential for creation of a "secondary, lower-quality system of degree provision in the province" (President, University of Lethbridge). Lower quality could result because of the limited research conducted in community colleges, the lack of access to appropriate library resources, inability to attract qualified staff and insufficient funding.

> The real danger is that discrimination between degrees will occur. One of the things that is unique to Alberta is the Transfer Guide. That will come apart if institutions begin to think there is a major quality difference between the various sectors. That's why the transfer guide does not exist anywhere but in Alberta.
>
> Secondly, what will happen is that graduate schools will begin to discriminate between postsecondary institutions. What happens if the Graduate School at the University of Calgary says it intends not to accept anyone other than graduates of undergraduate programs of the University of Alberta or the University of Calgary? Eventually, the whole postsecondary system is in chaos. The students are saying "what the hell, I'm part of the system. I have a degree in Chemistry from Medicine Hat College, why can't I get into graduate school?" One can conjecture a whole series of public issues like that. (President, University of Lethbridge)

In the view of the President of the University of Calgary, "degree granting status does not mean very much unless you define what that is." He stated that either a university or a college can grant degrees, but unless the degree was viewed as credible by the general public and by other degree granting institutions, the degree was essentially worthless. He shared the concern of the University of Lethbridge President that the outcome of degree granting status for the public colleges could be a closing of access to graduate programs in the traditional universities for college degree holders. However, he stated that if the baccalaureate degree was seen as solely a credential for work entry, then such lack of access may not be of as great concern to the general public.

Economic Considerations

All respondents stated they did not believe that the province could afford to support research and scholarly activities, and major library resources for all postsecondary institutions in the province. If such support were attempted, the President of the University of Lethbridge conjectured that "a second-class system of institutions would be created." The cost of allowing public colleges to grant degrees was seen as prohibitive.

> If a cost analysis were done on the actual expenditure required to create the University of Lethbridge, people would be staggered and actually scared of creating another such institution. (President, University of Lethbridge)
>
> If you build a university in Fort McMurray, then you are looking at millions and millions and millions of dollars. This cost is directly placed on the taxpayers. I don't think there is a government in Canada that's going to rebuild the entire system - they can't afford to. (President, Athabasca University)

More recently, the cost of degree granting authority in the private colleges was apparently exceeded the original estimates and "Camrose Lutheran College is approaching the government for additional funds " (President, University of Lethbridge).

However, any further expansion of the postsecondary system to increase access was seen to necessitate an increase in funding.

> If the government wants increased access to the system, it has to either increase the grants to the system or allow increases in student tuition. You can't hold both down and expect to expand. If you do, you bankrupt the quality of the institutions.
>
> Universities don't go broke, they lose their quality. The end result [of expansion without funding] is you trade down, so that you're giving away pieces of paper which have less and less value. (President, University of Lethbridge)

Incremental funding allowing for expansion of existing resources and facilities in the system was seen as the most cost effective way to approach this issue by all respondents. In particular, colleges would not be required to develop the infrastructure seen as necessary to offer quality degree programs. The President of the University of Alberta believed that the universities as a group would indicate to the government "that the best course of action is to provide additional funding to the universities."

What Would be the Effect of Degree Granting Authority on the Community College?

The President of the University of Alberta expressed concern regarding the effect that degree granting capability might have on college operations, particularly in the provision of non-university programs, but clearly expressed that he felt this was a concern that must be dealt with by the colleges themselves. The Associate Vice-President (Academic) expressed the view that it is extremely difficult for an institution to try to meet the needs of two different audiences in two differently focused programs. Fair allocation of resources was seen as a major problem. "Most of the interested institutions are quite small. Even trying to teach between the two programs and understand the students can be a very big challenge" (Associate Vice-President [Academic], University of Alberta). The President of the University of Lethbridge stated that if degree granting authority were approved for the public colleges:

> Resources will be primarily allocated to the new degree programs. Over a period of years, the end result will be that only ten or twelve non-university programs will be offered, in comparison to the present thirty or forty such programs offered in the colleges. That's a system problem the province ought to watch very carefully.

The President of Athabasca University believed the addition of degree granting capability to the public colleges would result in a loss of the flexibility and productivity of the college. He stated the public colleges have " tremendous flexibility " in meeting postsecondary educational needs in their communities, primarily because "the majority of college resources can be directed to instruction." The outcome of approval of degree granting status, he believed, would be an increased demand for research support in the province, and a move within the colleges towards a university style of governance in college management.

> In a changing labor market, a shared governance form of management is ill-suited; it cannot be a responsive entity. I wouldn't take the model of university governance as the way to respond to a rapidly changing world. The internal decision-making structures are such that by the time a need has been identified, it's being met by someone else.
>
> I've seen cases where colleges have been granted degree granting status, and ten years from the time they converted, they realize they are neither colleges nor universities. I think there are tremendous contributions that can still be made through community college programs, that is, where their emphasis is on the community and its needs.
>
> On the other hand, it is quite fair for college presidents to seek degree programs, if there isn't a university that is prepared to respond to the identified community needs. But in Alberta, there is [at least] one university willing to respond.

Feasibility of Extending Degree Granting Capability to the Public Colleges

The university respondents did not see extension of degree granting capability to the public colleges as a feasible approach in the present Alberta postsecondary educational system. The President of the University of Calgary stated the funding of increased enrollments at the University of Lethbridge could result in a decrease in the demand for undergraduate enrollments in other universities in the province. He stated that the demand for regional university programs "is really crazy; such decisions must be able to be supported economically."

Overall, the respondents took the view that the postsecondary system could be restructured to provide increased access to undergraduate degree programs without extending degree granting capability to the public colleges. Ensuring quality of degrees was seen as the major issue in feasibility:

> Would graduates coming from non-university institutions have equal access to graduate schools? Would the quality of faculty be there? Would the people be doing research and scholarly activities, or only teaching? What effect does that have on quality? What will be the level of funding? What about provision of libraries and laboratories? (President, University of Lethbridge)

The President of the University of Calgary argued that the public colleges would have a great deal of difficulty attracting well-qualified staff.

> Who is going to go to Red Deer? If they can't get a job in Lethbridge, Calgary, the University of Alberta, or Athabasca, they might go to Red Deer but probably not. They're more likely to go to the Okanagan in the joint venture University College program.

Several of the respondents stated that extension of degree granting authority to the public colleges might become feasible, if some type of accreditation board to ensure quality in college program degrees was established and maintained. This accrediting body should be independent of the individual colleges, universities, and the Department of Advanced Education. The President of the University of Alberta recalled discussion at a recent Consultative Forum (a formal meeting, held on an adhoc basis, involving all university and college presidents and representatives of the Department of Advanced Education) with the Deputy Minister of Advanced Education:

> I argued, and my friends at the colleges clearly didn't disagree with me, that it was not only in the interests of the universities, but in the interests of the colleges that there be a mechanism for declaring there was a legitimacy [in public college degrees].
>
> If we're going to go this route, whether through a cooperative arrangement with a university for a university degree, or a program leading to a college

> degree, we owe it to the individuals who take advantage of the programs offered at the college that everything is nice and clear before they get their degree. They shouldn't be told when they get their degree that the degree is second class.
>
> We have to be sensible and fair, and develop a mechanism which will cause the universities to feel as comfortable about the degrees which will be offered away from the four universities as they feel towards the degrees offered by them.

The President did not believe the colleges would object to such an accrediting body, as long as the proposed mechanism provided a fair assessment of college degree granting capability, and as long as the mechanism did not "absolutely guarantee that no college will ever be given authority to grant a degree." The President of the University of Calgary, although believing in the necessity of an accreditation process to ensure credibility of college degrees, saw a danger of increased conflict in the area of institutional autonomy and independence if an accreditation board was set up to grant program approval for the colleges.

The President of Athabasca University firmly believed "that the day of controlling where and how people learn is gone." He emphasized that while it may seem desirable to regulate degree programs in the province, it is probably impossible to do so. In addition, if an accreditation board were established, he questioned whether it would be at all helpful, because of the difficulties in determining what standards could or should be applied in determining "a quality degree." As an example, he reflected on the rise of Private Corporation degrees in the United States:

> What are these corporations' degrees worth? Well, lots of people are using them in the market and the market seems to see these degrees as being of value.

> A commonly identified quality standard for degree programs is the involvement of faculty in research. A. T. and T. could be refused accreditation because the individuals involved in their degree programs perform only teaching duties. A. T. and T. has an organization called Bell Labs, the largest research laboratory in the western world, which employs 45, 000 PhDs. How can anyone claim that their students are not adequately exposed to research?

The President argued that an open market society has been established in Alberta, and this market is led by the consumer. In terms of education, he stated the learner will determine what are appropriate options for credible degrees.

The essential requirement for feasibility seen by the President of the University of Alberta was that the Government of Alberta make a decision as to whether extension of degree granting authority to the public colleges would be an acceptable response to the demand for undergraduate degree education.

> [Universities] don't make societal decisions and we shouldn't make societal decisions. On the assumption that there will be a decision that more than the four universities can be involved in complete degree programs, then I think we better start considering a mechanism which would result initially in a review, but eventually [result in] the kind of blessing in which students, their families, instructors, and receiving institutions felt more comfortable, rather than less comfortable, about the value of the work that is done.
>
> What would be disastrous is a situation whereby the government gives authority to Red Deer to grant a degree, but none of the universities recognize that degree for any purpose at all.

The President of the University of Lethbridge noted that Red Deer College may be unique in Alberta and therefore, might deserve stronger consideration for degree granting capability. He further noted that Red Deer College had always matched its university-transfer programs to courses offered at a specific university and that over the past few years the College had developed enough courses to offer a full Bachelor of Arts degree, reflecting the specific courses required for such a degree in the universities.

Alternate Models for Extending Provision of Degree Programs

Restructure the University Sector of the Postsecondary System

The President of the University of Lethbridge stated his belief that the major need in the postsecondary educational system was development of a framework for the system which considers standards and quality, and within which institutions could develop their mandates and "play their defined role within the system." A need to develop distinctive institutional differences and distinctive differences in programs now offered in more than one institution was seen as one way to ensure quality by "having institutions do what they do best." Therefore, the President believed that decisions must be made as to the allocation of specific disciplinary programs across the province. "It is unrealistic for small institutions and community colleges to think about duplicating many of the programs which require the facilities of large institutions." Distinctions among institutions as to the type of research undertaken was also seen as necessary to build institutional quality. To further explain this framework, the following example was given:

> The University of Alberta has the obligation of maintaining itself as the premier research library in the province. ... What I want is to be plugged in, on-line, to the card catalogue at the U of A, and a high degree of access to inter-library loan. That's of critical importance to us ... our library will provide some excellent resources but it will never be a research library.
>
> Similarly, the University of Lethbridge might have some regional programs dealing with master's work particularly related to education, and some other small master's programs, but the main graduate level programs have to be at the University of Alberta and the University of Calgary.

> Research can be either faculty-curiosity driven, or contract research. One has to be aware of the balances of each type of research in each institution. It may well be interesting from a system point of view to see if the University of Calgary evolves as a major contract research institution because they have a high interest in technology transfer. Whereas, maybe the University of Alberta's thrust evolves as curiosity-driven, basic research. The University of Lethbridge has to struggle to be engaged primarily in curiosity-driven research and maintain itself at a level such that the productivity of faculty is sufficient to maintain quality.

Determination of an agreed upon system of articulation between community college, baccalaureate, and postgraduate studies was seen as essential to ensure access within the system.

The Associate Vice-President (Academic) at the University of Alberta argued that there was an outstanding need to review all postsecondary educational programs and "determine how the current level of resources can be better utilized." A major criterion should be that expensive and costly programs would not be duplicated. Quality considerations should underlie determination of what specialized programs should be offered in what institution, and form the basis of program approval.

> A system view, not just an individual, localized, institutional view should determine the approval of programs. The institution may be ready to offer degree programs, but where does that fit in terms of the whole picture?

The President of Athabasca University believed the critical need was "to change the way education is delivered." He stated one of the criticisms of education is that it has done little to eliminate the class structure or provide true equality of opportunity. One way of providing true opportunity is to begin to utilize the communication technologies available in our society. He stated there should be less focus on the decline of standards, which he believes is a myth, and more focus on the "potentially revolutionary educational potential of computers." A focus on the use of the new technologies was also seen to reduce the need to provide adequate library resources in all locations because access to data banks could be assured.

Collaborative and Brokered Programs

The President of the University of Calgary was supportive of brokered programs between the public colleges and that university. "I think there is a lot of sense to the University working more closely with the colleges than we have been." Initial discussions had been held with Medicine Hat College regarding development of such programs in the humanities and arts disciplines, but no concrete action had occurred as yet. The ability of the University of Calgary to participate in such programs was seen as directly related to the availability of funding for such programs.

> We're running an operation here that is stretched as far as it can be in terms of resources. We won't be able to enter into brokering arrangements with the colleges unless someone supplies us with extra resources. They must be willing to do that.

The President of Athabasca University also supported collaborative programs, or other arrangements between the colleges and universities as "the best way to provide degree programs."

The University of Lethbridge was developing major program initiatives, primarily in conjunction with Medicine Hat College, to offer third year programs and some fourth year baccalaureate courses in Medicine Hat. Disciplines being considered were Fine Arts, Arts and Science, Education, and possibly Nursing. Offering a full University of Lethbridge degree program at Medicine Hat College was seen as a long term goal. Implementation and further development of these collaborative programs was seen as dependent on funding.

The President of the University of Alberta stated that brokered or collaborative models could only work in exceptional and limited circumstances, when the individuals directly involved in the proposed program at both the college and the university had a high degree of interest in such programs.

> We may very well have a program in Nursing offered entirely ar Red Deer and resulting in a U of A degree. We'll have some control over what's done in Red Deer in the last two years of the four year program, and indeed some of my colleagues will be offering courses in Red Deer. Other people, who are identified with Red Deer College, will also be offering courses which are officially designated as University of Alberta courses.
>
> So it can work, but the big difference between what I think is going to unfold in nursing and the "grand design" is that you have people at the University of Alberta in the Nursing Faculty who are just as keen as the people at Red Deer in their Nursing faculty to have this come about. And you can't say that when you discuss the Faculty of Arts or Business for example.

The Associate Vice-President (Academic) at the University of Alberta stated that brokered, collaborative programs are "innovative and a great idea," and believes such programs will become more common in the future if funding is available. She did emphasize that there must be a spirit of cooperation and adventure in both institutions before these programs can be initiated, and the university must retain approval of the program to ensure maintenance of academic quality. The cooperative Nursing degree program at Red Deer College was seen as a "good test case for us to see what other programs this could apply to." Again, brokered programs were not seen as possible in every discipline. In particular, disciplines such as Science were describe as "likely to find it difficult" due to the laboratory requirements for completion of that degree. Further development of brokered programs was seen as dependent on the colleges initiating such proposals. The Associate Vice-President (Academic) was not aware of any proposals for brokered programs other than the Red Deer Nursing proposal.

> I think the university right now probably has more than can be coped with at one time, but if something comes to them, it will be examined to see if it can be accommodated.... I'm not sure it will work in every case, but I think that it opens up all kinds of options. I think we could a better job with some of the innovations an make these [types of programs] possible.

Capstone Model

The University of Calgary would also be open to Capstone programs at the public colleges, provided that additional funding was made available.

The Capstone project between Athabasca University and Keyano College was seen by the President of Athabasca University as "an absolute success." The first two years of university studies are offered solely by the college, which required some adjustments in the original university-transfer program offered by the college. The third and fourth years of the programs are provided by Athabasca University, on site at Keyano College, utilizing either Athabasca university instructors or college instructors approved by the University. Programs result in a Bachelor of Arts, Bachelor of General Studies, or Bachelor of Business Administration degree awarded by Athabasca University. The project was seen to be highly cost-effective.

The Capstone model as presently developed between Athabasca University and Keyano College was fully supported by the President of the University of Alberta. He stated this was a very workable model for extension of complete degree programs.

> One problem [I see] is that some of the colleges that are interested in Capstone programs, if they were completely honest, would admit that it is a University of Alberta degree that they want, not an Athabasca degree. I don't think that is universal ... but I hear this occasionally.

University College Model

The President of the University of Calgary argued that the University College Model may be a very feasible model in the Alberta context.

> I know that some people in Alberta think it won't work but I still think it bears consideration, and the project in B.C. should be watched closely. The Okanagan College project has merit ... and the potential for quality education is there.

The President of Athabasca University did not believe that the University College Model was a feasible model for extension of degree granting program provision. His experience has demonstrated that University Colleges convert to universities or junior colleges shortly after their creation. He stated that the establishment of this model in British Columbia was already creating some difficulties in that province. A University College was seen as "neither a university or a college. It sets up an in-between area, and that I think is a real problem." The President stated that the distinction between a university and a college is the university commitment to research and scholarship, and that "if that commitment is not there, then the University of Alberta would be a wonderful community college." The President of the University of Alberta was also opposed to the University College model.

> The most desirable way to meet the future needs for university education is to prepare an institution for university status, not play what I feel is a game, saying, this institution isn't a university but enabling the institution to do university work. I don't know what you have but it isn't a university.

The President based his opinion on his experience with such programs in eastern Canada, and his experience with the private colleges obtaining degree granting authority in Alberta. The College Classiques in Quebec offered full degree programs in non-urban areas in conjunction with one of the three French universities.

> [The concept] just didn't work! The people in the colleges were horrified that they were being controlled by universities that didn't know what they were doing, didn't want to know what they were doing, and resented them. That was their perception.
>
> The people I spoke to in the universities were horrified that they were forced to give a degree for work over which they had no control.

In his opinion, the underlying reasons why the expanded affiliation arrangements originally planned to extend degree program provision to the private colleges in Alberta did not work reflect the same concerns for institutional integrity that he observed in Quebec.

> My colleagues, here, I think were behaving understandably, appropriately, and responsibly, when they said "we can't just give the U of A degree without asking questions -- who are the instructors? what courses are they offering? and so on." Camrose Lutheran College, which had been autonomous for a long time, was of course concerned that its autonomy would be modified if they had to satisfy another institution.

Extend the Role of Athabasca University

Athabasca University had proposed a plan to the government to clarify and extend its mandate for provision of degree programs in the province. The proposal included changing the length of the undergraduate degree programs offered from three years to four; the extension of Capstone programs to other Community Colleges in addition to Keyano College; and two new initiatives:

> We are proposing four brand new degrees: a Bachelor of Science, Bachelor in Nursing, Master's degree in Distance Education, and the first distance Master's in Business Administration degree.
>
> We're also proposing to become the fourth residential university, serving primarily northern Alberta.

The mandate of Athabasca University is to increase accessibility to and opportunities for university education. The proposal to government was based on the university's assessment of unmet needs in the province. The President stated Athabasca University had no intention to develop as a multi-university similar to the University of Alberta.

> Nursing is a prime example of an unmet need. There is no question in this province that there are many nurses working who want to return to school to get a degree, and we're not doing a good job of meeting that need. And we're not going to do a good job for two or three years, even with the U of A involvement in cooperative programs in nursing, because of the models being used. So we're proposing to offer a degree in nursing as a matter of accessibility, and to meet unmet needs.
>
> We're proposing a Bachelor of Science degree with a special focus on women. We're proposing the M.B.A. because there is obviously an unmet need in that area .... Our primary area of specialist expertise is distance education and open learning instruction. I would not see us becoming a multi-university with research programs in medicine, etc. -- that is what the University of Alberta is.

The President of the University of Alberta supported the expansion of this "special nature" of Athabasca University.

One issue associated with expansion of Athabasca University degree provision was the perception of the credibility of Athabasca University degrees. No other respondent mentioned this concern directly, but the President of Athabasca University acknowledged it was a concern in the system. He viewed questioning of Athabasca University's credibility as directly related to the initial offering of a three year degree by this university (when the other universities were proceeding to offer four year degrees), the desire of individuals to have face-to-face teaching rather than solely distance education methods of teaching, the lack of clarity as to the mandate of Athabasca University, and the lack of a residential program in any discipline at Athabasca University. He was hopeful the proposed changes to the mandate would satisfactorily address these issues, and that the Athabasca degree would become more credible.

Encourage Provision of Programs by Out-of-Province Institutions

The President of Athabasca University agreed with what he believes is the Alberta government stance that, "if Alberta universities are not offering desired degree programs in ways and locations that meet the need, then it is fair to allow foreign institutions to do so." He was very concerned with the personal cost of these programs to the individual, e.g. that the tuition fees can be ten times that of a similar program offered by an Alberta university. He argued that Athabasca university is, and should be, developing programs which would decrease the need for out-of-province institutions degree programs.

Establish a Fifth University

Overall, creation of a fifth university was not supported by the respondents but was identified as a possible policy solution. The President of Athabasca University stated that if the province wishes to create an additional university, "that may be an excellent way to go," but he strongly believed that a broader mandate for Athabasca University would "provide enough capacity, provided there are also creative arrangements within the system to meet the present and projected needs." The President of the University of Alberta stated that once the capacity of the present system has reached its maximum in terms of provision of undergraduate education, then creation of a fifth university would be the preferred option.

> When we feel we've pushed to the limit the model we now have of four universities with public colle[illegible]... quite actively involved at the first and second year level, then we [illegible]e difficult decision as to where a fifth

> university should go, and call it that -- a fifth university. Clearly, that fifth university might be away from Calgary, Edmonton, or Lethbridge.

The President of the University of Lethbridge conjectured that this alternative would be backed in the city of Red Deer, primarily by the business community, who he believes see a university as encouraging economic development in the region. The cost factor of this alternative was seen by the President as negating any feasibility to this solution. The Associate Vice-President (Academic) of the University of Alberta believed "the school in every neighborhood philosophy is unrealistic in today's world" because of the rising costs associated with provision of postsecondary education.

Establish a Task Force to Develop Alternate Recommendations

The President of the University of Alberta argued that the Minister of Advanced Education should establish a task force to assess the issue of the need for increased degree program provision and develop alternate recommendations for resolution of the issue. Such a task force should be composed of representatives of all key stakeholders, that is, public colleges, universities, and the Department of Advanced Education. The President stated this would inherently mean the Minister and the Department of Advanced Education

> Recognize as a real possibility that institutions other than the four universities would be authorized: a) to offer programs on their campuses for degrees issued by the universities, and/or b) to offer programs on their campuses leading to degrees issued by the particular college.

No other respondent discussed creation of a task force but all university respondents emphasized the necessity for the institutions and the Department of Advanced Education to be fully involved in discussions towards development of alternate policy solutions to address the issue of access to baccalaureate degree programs. Therefore, support for some mechanism to examine this issue was evident among all respondents.

SUMMARY OF FINDINGS FROM THE UNIVERSITIES

This section of the chapter provides a summary of the interview responses of the individuals representing the universities, according to the data categories selected for the presentation of the interview data. The summary describes the areas of agreement and disagreement among the respondents for each category.

Demand and Need for Baccalaureate Education

All respondents for the universities agreed there was a rising demand for baccalaureate education in the province. The continuation of this demand was attributed to the social value attached to this level of education in Alberta society, and to the growing demand and need for individuals educated at a baccalaureate level in the workforce.

The majority of the respondents saw a need to increase the provision of baccalaureate programs to some extent, either through expansion of the present universities, or through provision of such programs in outlying areas by the existing universities.

All respondents expressed a belief that the economic capability of the province must dictate how much the provision of baccalaureate education can be be increased. A major concern of all respondents was that quality must be maintained in all such programs offered.

Capacity of the Universities

There was limited capacity for expansion of enrollments in the universities at this time. The University of Lethbridge, and possibly Athabasca University, could enroll additional students without requiring additional funding.

If funding were made available to the universities, the University of Calgary could increase its enrollments by 5,000 to 10,000 students and the University of Lethbridge by 1500 to 2000 students, for a maximum total of 12,000 additional places in the traditional universities. An unquantified increase in placements at Athabasca University could occur. Only the University of Alberta expressed a desire to maintain its current level of 20,000 undergraduate enrollments.

Regional views of appropriate access were seen to directly affect the perceptions of the public as to whether or not the universities had adequate capacity to meet the enrollment needs for baccalaureate education. The majority of respondents believed Albertans expect such access within their home region, and do not consider availability of enrollment outside that region as reasonable or equitable access. An additional issue was the lack of clarity of Athabasca University's mandate as a university, as compared to the other universities, in providing regional baccalaureate education.

Is There a Transfer Crisis?

The Presidents of all four universities believed there will be a lack of places available in the third and fourth years of baccalaureate programs in the three traditional universities by 1990. The majority of respondents believed that the issue could be resolved utilizing the facilities of the current system.

Particular issues which were seen to complicate easy resolution of the projected transfer crisis were identified as: the variation in academic admission requirements between institutions; the effect of quotas on diminishing access to third and fourth year programs for both generic university and college university-transfer students; determining a balance between the rights of students who begin baccalaureate programs at a university and the rights of students who begin baccalaureate transfer programs at the public colleges; and maintaining quality while ensuring access to baccalaureate programs.

Quality in Baccalaureate Programs

Ensuring maintenance of quality in baccalaureate degree programs was a major concern of all respondents. Quality was seen as dependent on an adequate library, sufficient numbers of well-qualified faculty, active research programs by faculty teaching in such programs, and adequate funding to financially support these essential aspects of high quality academic programming.

The current shortage and projected severe shortage of qualified individuals for university faculty positions was of major concern to all respondents in terms of maintaining quality in the present baccalaureate degree programs. Respondents believed well-qualified individuals would continue to be attracted to the universities; other institutions will be forced to hire less qualified individuals.

Research by faculty was seen by all respondents as essential to ensure that the teaching in degree programs reflects the most current level of knowledge. Little validity was granted to the claim that research activities detract from provision of high quality teaching. Exposure to research at an undergraduate level was also seen as necessary to provide the groundwork for development of expertise at the Master's and PhD levels of education.

No university respondent believes the quality of the present university-transfer program in the public colleges can or should be questioned. The respondents reported all studies conducted by the individual universities demonstrate that college university-transfer students complete their baccalaureate programs with no difficulty and, in some instances, with less difficulty than students who complete all four years at a university. All respondents stated, however, that this level of quality cannot be carried over into third and fourth year programs at the colleges. Essentially, the elements seen as necessary to quality (library, faculty qualifications, and research) were seen as even more crucial in the last two years of baccalaureate degree programs.

Desirability of Extending Degree Granting Capability to the Public Colleges

None of the university respondents believed extension of degree granting capability to the public colleges was a desirable policy solution to meeting the needs for baccalaureate education in the province. A baccalaureate degree was seen as requiring credibility both in the eyes of the public and by other degree granting institutions.

None of the respondents believed institutions which offer both degree and non-degree, career-oriented education could be academically credible. Development of such institutions may result in a secondary, lower-quality system of degree provision in the province, resulting in discrimination between degrees based on which institution granted the degree. In part, this concern was based on the respondents' assessment that the elements seen as necessary to maintaining quality in baccalaureate programs are not evident, or are limited, in the public colleges.

Feasibility of Extending Degree Granting Capability to the Public Colleges

Based on the belief that offering quality degree programs means that research and scholarly activities, and access to major library resources are essential, the respondents believed funding of degree programs in the colleges was undesirable, and not economically feasible in the province.

The President of the University of Calgary stated the demand for access to degree granting programs might decrease as the availability of places at the University of

Lethbridge became known to the public. Other respondents believed the regional pressure for degree program access would not be moderated by such knowledge.

All respondents stated the public colleges would have a great deal of difficulty in attracting well-qualified staff, particularly as the shortage of PhD qualified individuals increases. The majority of the respondents believed that the addition of degree granting capability to the public colleges would have a detrimental effect on the provision of non-university programs in the colleges. A steadily increasing emphasis on, and resource allocation to, the degree programs was predicted as a highly likely outcome of such a decision. The President of Athabasca University expressed his concern that the colleges would lose their current productivity and flexibility in meeting educational needs, as the colleges would increasingly adopt a university style of governance and management.

Several of the respondents stated granting degree granting authority to the public colleges might become feasible if some type of independent accreditation board was established to ensure quality in the college baccalaureate programs. Such accreditation was seen as the best way to forestall discrimination between degrees awarded by institutions which would inevitably lead to a "second class" system of degree education. The respondents do not agree as to whether such a mechanism would be acceptable to the colleges; it could be seen as a threat to institutional autonomy. The President of Athabasca University believed that such a controlling body would be politically unacceptable and that the public will establish which degrees are credible through their market choices.

There ares also conflicting opinions as to whether particular colleges -- for example, Red Deer College -- may deserve strong consideration for degree granting status based on the current level of development of university programs and facilities. The majority of the respondents agreed that a decision to grant such authority to one college would create a political necessity to extend this to all other public colleges.

Alternate Models for Extending Provision of Baccalaureate Education

All respondents supported expansion and "outreach" of present university programs to meet the known regional needs for baccalaureate programming. Although this approach will require funding additional to that currently provided to the universities, it was seen as a much more cost-effective way to meet the need, which allows for incremental expansion of the system while maintaining the quality of the degrees awarded. Several alternate procedures and models were seen as feasible by the respondents.

Restructure the University System and Library Access Systems

Respondents from the University of Alberta, University of Lethbridge, and Athabasca University strongly believed there was a need to review the provision of all postsecondary educational programs, and decisions made as to the types and specializations of programs offered in each of the universities, the type of research each institution would primarily be involved in, and the specific roles and mandates of each institution, with this criterion in mind: "expensive and costly programs should not be duplicated." The postsecondary institutions should be developed with distinctive differences in programming, particularly in programs which are offered by more than one institution. Structures of articulation and transfer between institutions were seen as requiring clarification.

The President of Athabasca University stated the critical need was to foster change in the delivery methods used to provide degree education, particularly in fostering the use of computer technology in postsecondary education delivery. Access to data banks through the use of on-line computer transmissions, and increased support of the inter-library loan system existing in the province were seen as cost-effective ways to provide the required library resources for regional baccalaureate programs by both the President of Athabasca

University and the President of the University of Lethbridge. By encouraging such use of technology, the President of Athabasca University believed steps could be taken to redress the inequalities of opportunity for postsecondary education which exist in the province.

Support For Collaborative, Brokered, and/or Capstone Programs

The Presidents of the University of Calgary, University of Lethbridge, and Athabasca University supported development of mechanisms which would permit the universities, in cooperation with the colleges, to offer complete baccalaureate degree programs utilizing the facilities of the public colleges. Additional funding was essential for such program development.

The respondents at the University of Alberta believed that brokered or collaborative types of degree programming could not be developed and supported on a general basis; such programs could only be offered in specific disciplines and in specific circumstances. Central to provision of such programs is agreement on university control of these programs, including determination as to whether the college has the facilities and resources to support high quality program development. The University of Alberta President did strongly support the Capstone program model developed between Keyano College and Athabasca University, and believes it may be a very workable model within the system.

A concern expressed by the three traditional university respondents was that these universities may be limited in their financial and human resource capability to expand such programming options.

Create University Colleges

The President of the University of Calgary believed the establishment of university colleges may be a very feasible model in Alberta. The Presidents of Athabasca University and the University of Alberta were distinctly opposed to this model, based on beliefs that an "unfocused" institution results, and that increased conflict over institutional autonomy is an unavoidable outcome. The President of the University of Lethbridge expressed no opinion of this model as a possible policy solution.

Expand the Role of Athabasca University

Expansion of the role of Athabasca University was seen as the most feasible model by the President of Athabasca University. Expansion would include provision of an expanded number of baccalaureate degree programs through distance education, on-site programs at public colleges, and on-site programs at Athabasca University. Specific programs offered would be determined by evidence of unmet needs in the province and/or specific regional areas. This model was supported by the President of the University of Alberta. The Presidents of the University of Calgary and University of Lethbridge stated they could not form an opinion based on the current lack of clarity in university mandates.

Create a Fifth University

Creation of a fifth university was not supported by any respondent other than the President of the University of Alberta who cautioned that this option should only be considered after other models have been initiated and a distinct need for further baccalaureate program enrollments had been established. Basically, the respondents saw this option as economically not feasible.

Encourage Degree Program Provision by Out - of - Province Institutions

Only the President of Athabasca University expressed his belief that this policy solution was a viable way to meet the current unmet needs for baccalaureate degree programs in the province. The cost of such programs to the individual is very high and therefore, such programs were not seen to address equity concerns regarding access to baccalaureate education. He also stated that the extension of the Athabasca University mandate, and other extensions of degree program provision in the province, should result in a decreased need for such programs.

Establish a Ministerial Task Force to Recommend Policy Solutions

Only the President of the University of Alberta recommended establishment of a ministerial task force to consider and recommend policy solutions; no support was evidenced for this concept by the other university respondents.

PERCEPTIONS OF THE RESPONDENTS REPRESENTING THE ALBERTA DEPARTMENT OF ADVANCED EDUCATION

An interview was held with both the Deputy Minister of the Alberta Department of Advanced Education and the Assistant Deputy Minister, Policy and Planning on July 27, 1989. The responses of these individuals are reported according to the established data categories.

Demand and Need for Baccalaureate Education

The Deputy Minister of the Department of Advanced Education stated that "there is probably no question that we need to train more skilled and professional level people over the next two decades." The demand for degree education was seen to reflect a view of the changing requirements in the economy for skilled labor and some elements of "credential creeping."

However, the Department respondents did not believe that the supply of students to the postsecondary institutions over the next ten to fifteen years would increase markedly over the present levels.

> In terms of a demand from students for more baccalaureate education -- in an aggregate sense across the province and across disciplines -- we think we

> may have plateaued for a few years. We probably have some breathing room in terms of making decisions about where we go from here. ... We should be ready to implement [these decisions] in the middle to late nineties, but we've got some time in which to think about what's the most appropriate thing to do.

The Deputy Minister acknowledged that the postsecondary institutions in the province do not necessarily accept the Department's point of view, or the methodology used by the Department to calculate the demand, and that the institutions generally believe the Department is underestimating "what is out there."

Regional Needs

On a regional basis, the Deputy Minister stated there are "undoubtedly areas in the province where there was a need or a perceived need" for local provision of undergraduate degree programs. Noting that in the public mind, perceived needs are as real as actual needs, the Deputy Minister stated the interest in degree granting capability in the public colleges most likely reflects both real and perceived needs.

> [There is] a view in the community and in the colleges, that a student ought to be able to access education without having to leave their home community. It's in large measure I think, from the students' perspective, a cost issue.
>
> One of the things we have to grapple with is to make sure there is a pretty clear understanding in the minds of people, and in the minds of ministers, of the difference between private costs and public costs.

The Deputy Minister emphasized that although the cost to a particular individual may be high if that individual is required to leave home to attend university, the cost to the public is appreciably higher if a degree granting institution were created to educate that person.

Secondly, in terms of regional needs, the Deputy Minister believed that more and more rural people are interested in obtaining a university education, but these people have some difficulties in moving from the rural to urban areas.

> They're uncertain about moving to the city. It's not so much of a cost issue, it's "am I going to be comfortable, and how will I fit into a big institution?" They have gone to schools and colleges which are small, friendly, and where they know everybody. They're a bit shy about getting lost.

A need was seen to incorporate this regional dimension into planning projections for university education in the province.

The northern Alberta region was seen to have special problems in terms of access to postsecondary education.

> I think the Native communities, in particular, have a very difficult time adjusting to an urban atmosphere and a large institution. And those that do come and make it, tend to stay in the big city.
>
> So the skills that are needed, such as nurses, social workers, and teachers, are still going wanting in the north. We have to deal with that; it's a real problem.

The Department was examining ways to provide degree granting programs for teachers and social workers in the North which would recognize "those special problems."

An additional problem was seen in Calgary, that did not appear to exist in Edmonton. Firstly, the University of Alberta had not set an enrollment cap but had set an entrance requirement. This was not seen to necessarily limit enrollment. As well, three of the Private Colleges with degree granting status exist in the greater Edmonton area, and " act as pressure release valves where students can go if they're not admitted to the

University of Alberta." The University of Calgary had set a cap on its enrollments, with the overall enrollment at this institution limited to 20,000 students. There is no accredited private college in the greater Calgary area.

> The alternative is for the Calgary people to go to the University of Lethbridge where there is, we hope, lots of physical and financial capacity to grow, and we've been encouraging them to grow. I think that's what has to happen, and it's actually started to happen. Calgary students are starting to look at the University of Lethbridge as a realistic option.

Capacity of the Present Universities

The Assistant Deputy Minister, Policy and Planning, stated that, based on current information, the Department of Advanced Education believes that "the universities more or less can accommodate what we perceive is the demand on the part of students." He emphasized that there are no specific measures to estimate society's demand for baccalaureate graduates but there are such measures to determine demand by students.

> But simply saying "yes, there is a demand" is not the end of the story. Extending degree granting capability to the colleges is only one of many possible ways to accommodate the demand of society and the demand of students for degrees.

Is There a Transfer Crisis?

In terms of the potential for a "transfer crisis" identified by the college and university respondents in this study, the Deputy Minister stated that "1990 is the critical year in the sense that some decisions have to be made for that year, but I wouldn't call it a crisis." The Department respondents recognized that the transfer capacity was expanded by some 800 students in 1988-89, and that "a bubble" of students would be ready for transfer in 1990. However, there were not sufficient data to determine the extent of the problem.

> We [the Department] certainly feel a moral obligation, that having got these students into transfer programs, we must ensure that they have an opportunity to complete their degrees. There is no question about our sense of moral obligation.
>
> The question to us, then, is, Can the system accommodate what we have done without any further action?

Based on current Departmental data, the Deputy Minister was "less and less certain" of the need for special action. The enrollment data for 1988-89 reflected a lower first year enrollment at the University of Alberta and the University of Calgary than had been anticipated. Preliminary indications of enrollments in the postsecondary system for autumn 1989 were also less than had been anticipated. Therefore, the current assessment was that there would be adequate spaces in the universities.

> That is not to say the universities will not see it as a problem. What they'll have done is trade first year students for third year students; and the argument they will make is third year students cost more than first year students; and, therefore, the [Department's] obligation is to provide us with more money to accommodate these students.

Both respondents emphasized that the primary consideration of the Department is, and must be, the student. Ensuring that the student receives a quality degree and a credential which is "acceptable" was seen as a priority in assessing alternate forms of degree program provision.

Considerations in Accessibility to Baccalaureate Programs

Both respondents expressed their belief that accessibility to undergraduate degree programs cannot be the only factor taken into consideration when determining the adequacy of the postsecondary educational system. The Departmental definition of accessibility was reported as follows:

> People who are qualified and motivated shall have access to a postsecondary education.
>
> But in the fine print, it is always said, not necessarily in the place you want it, nor necessarily in the program of first choice. But their will be accessibility. (Deputy Minister)

The Deputy Minister stated there is a political requirement to balance accessibility to postsecondary education with the fiscal imperatives of the province. The primary fiscal imperative is to decrease government deficits.

The current postsecondary educational institutions in Alberta were seen by the respondents to reflect a high level of quality and accessibility.

> We already have a [postsecondary educational] system that is the envy of most people in this country. Our expenditure per capita, our expenditure per student, is right up there. I've had people come to me and say our community college system is a model for the rest of the country. If we talk about universities, the University of Alberta and the University of Calgary, depending on the program being talked about, are ranked in the top two or three in the country. The University of Lethbridge is noted for its liberal arts approach, and particularly for its fine education degree. Athabasca University is talked about as being on the leading edge in off-campus, distance delivery. (Deputy Minister)

The over-riding question was seen as one of determining the fiscal priorities of Albertans. Many of the quests for degree granting capability in the smaller communities were seen by the Deputy Minister as being tied to the need for economic development. These requests do not mean that further postsecondary educational opportunities are required.

> One of our political leaders in the last government expressed the view that what we had here was a maturing of community aspirations. We've gone past a courthouse, post office, a public works area, to a hospital, and now a post-secondary institution.

> It's a symbolic type of thing. It's a status type of thing -- we've arrived! And it is seen as an economic development opportunity, as we're hearing from people in Stettler, Brooks, and Wainwright [who have stated], "We'll get people here and they'll spend their income in our communities."
>
> If you listen carefully, the educational opportunities and benefits come pretty far down the check list.

The Role of the Private Colleges in Improving Accessibility

Consideration of the role of the private colleges was seen as essential to any examination of the accessibility to degree programs in the province. "The private colleges are desperately wanting to grow and need to do so" (Deputy Minister). As the Department provides between twenty-five and fifty percent of the operating funds for the three private colleges, a need was seen "to look carefully at the money the government has invested through supplementing [the private colleges] operating budget, but also at the money and effort those people have invested."

The Deputy Minister stated that Camrose Lutheran College was "very, very concerned" about the ambitions of Red Deer College, and the implications of those ambitions for Camrose Lutheran College. The Department considered the private colleges a definite part of the postsecondary system, which must be included when examining enrollment demand.

> To date we have told them we won't support more than their Arts and Science programs. We won't provide support for professional degrees. We see them more in the nature of liberal arts institutions, which satisfies the societal demand for an educated populace.

Student Access to Out - of - Province Institutions

The Assistant Deputy Minister, Policy and Planning, pointed out that two other means of defusing the degree program enrollment issue already exist in the province. Students attend universities outside the province to obtain degree programs not offered here, or recently, when they are denied admission to Alberta universities. These students do receive Government of Alberta student loans for these programs.

Secondly, out of province, and out of country institutions are presently offering degree programs within Alberta. The Assistant Deputy Minister saw that ways to increase the numbers of programs offered by these institutions could be considered.

> So there are two other ways -- they might not be total or ideal ways ... but they are two other ways in which people can access degree level education.
>
> In terms of cost to the Alberta government, it doesn't lower the costs to the individual, but it certainly lowers the cost to the government, dependent on the arrangements that these outside institutions negotiate.

Neither of these alternatives was seen by the respondents as adequately addressing the regional view of equitable access to baccalaureate programs.

Quality in Baccalaureate Programs

The Deputy Minister, Policy and Planning, emphasized that from a policy point of view, the Department requires assurance that students will get a quality education and that appropriate transfer arrangements between institutions are in existence. Major differences in views of what contributes to the quality of undergraduate degree programs between the university and college sectors were seen to have a direct impact on the issue of extending degree granting authority.

What is Meant by the Term "Baccalaureate Degree"?

The Assistant Deputy Minister, Policy and Planning stated the whole question of whether or not degree granting capability should be extended beyond the present university/private college structure "revolves around the definition of what is a baccalaureate degree, that is, what should be the expected outcomes of such education?." He stated that while part of the issue involves access to degree programs, another part of the issue is the difference between education and training. He believed the colleges were most likely more interested in the skilled occupational/professional type degrees, rather than the arts and humanities degrees.

> It's one thing to talk about a Baccalaureate in Arts; it's another thing to talk about a Baccalaureate in Law, Engineering, or Pharmacy. So while part of the issue is access to a baccalaureate, part of the issue is, what is the difference between education and training?
>
> Access to a degree in engineering may be quite different to access to a degree in arts. It might signify something different.

Is There a Need for Research in Baccalaureate Programs?

The Deputy Minister stated that the college representatives who have discussed degree granting authority with the Department have indicated that they do not wish to do research. Noting that this was a point of contention with the universities, the Deputy Minister emphasized that

> if research is incorporated into the colleges, this has major financial implications for the government. Not only is this an expensive proposition, but we in the Department would have concerns with the change to the basic nature of the community college.

The Deputy Minister did not believe the position of the Department was "as strong a position as that of the universities on the need for research in the colleges, if degree granting capability were extended to those institutions." She noted that there are postsecondary education systems where degrees are granted without any exposure to research within these programs, and these degrees are considered very acceptable by both the public and the educational institutions.

The Assistant Deputy Minister, Policy and Planning, reflected that the other issue is

> the belief that good teaching will result in more credible employees, and therefore such degrees will be more acceptable to employers. If the degree is acceptable to the employer, the degree is credible.

He states that if a decision was made to support a "training-type or occupational degree, the degree would need to be supported for what it is."

Are There Adequate Numbers of Qualified Faculty Available?

The Department was aware of "a looming shortage nationally and internationally of PhDs. This was seen as a major factor in the issue of extending degree granting capability as "we see the market [for faculty qualified at the PhD level] as becoming very, very tight and very, very expensive" (Deputy Minister). However, The Assistant Deputy Minister, Policy and Planning pointed out that although it would be quite difficult to staff public colleges with PhD level staff,

> One must question if the ability to staff with PhDs is germane to the discussion, if one is looking at extending degree granting to the public colleges.
>
> Is a PhD required for the faculty of public colleges, if the focus is teaching and not research? I don't know how that would be answered.

Desirability of Extending Degree Granting Capability to the Public Colleges

The Deputy Minister stated that the community colleges have been a success story in Alberta, primarily because of their ability to be locally responsive and adaptable.

> We would be concerned about what might happen to that community college dynamic if you put on it a degree granting capability, particularly if that degree granting capability contemplated research. There is a whole different ethos around that. It affects, I think, the attitudes of the college toward the community, and affects the attitudes of the college towards provision of services within the community.

The Department of Advanced Education was undertaking internal studies and discussions on this issue. The Departmental discussion as reported by the Deputy Minister had focused on "the credibility of a degree resulting from any program, and the need to ensure transferability between institutions." Both individuals interviewed believe there were many viable ways in which to meet the needs for baccalaureate education, but a decision on the most desirable and feasible ways for the Alberta postsecondary educational system had yet to be made.

Feasibility of Extension of Degree Granting Capability to the Public Colleges

Both respondents emphasized that the Minister of Advanced Education and the Department staff believed that there was not an aggregate "lack of capacity" problem in access to degree programs or enrollment capability, and that consideration of extending degree granting capability to the public colleges must be carefully explored and examined before any decision was made. No such decision would be made in the near future.

> Mr. Gogo has clearly taken the view that there will be no immediate decisions. He made it very clear in Red Deer just a few weeks ago that he would make no decision on degree granting status until the fall of 1990.
>
> The next step we take is a fundamental step in the development of postsecondary education in this province. We better make sure it is the right step, and we know what we're doing. We created Athabasca University and two years later we were trying to figure out something for Athabasca to do. We created Westerra and the same sort of thing happened. We want to be sure of our facts, and to be as comfortable as we can with the ultimate solution. (Deputy Minister)
>
> We have to live with the solution for a long time. The Department does; society does. (Assistant Deputy Minister, Policy and Planning)

Models for Extension of Baccalaureate Programming

Expand University Capacity for Enrollment

Expanding the universities to accommodate the perceived need for baccalaureate education was seen by the Deputy Minister as "clearly the solution, if you believe there is an aggregate problem." It was seen as the least costly of all solutions, and as probably the most acceptable solution to the universities. Given the belief of the Department that the issue was much more of a regional problem,

> then expanding the universities is not necessarily the solution.... we could expand [the universities] and the people in Red Deer would still be unhappy. They will say we want degree programs here.

Collaborative, Brokered, or Capstone Programs

The Assistant Deputy Minister, Policy and Planning stated that one of the first questions asked in the Department would be "Is the student getting a quality degree and an acceptable credential?" Particularly in rural areas where the demand for degree completion programs was relatively small, these concerns with the quality and credibility of the degree awarded make Capstone and brokered types of degree programs more attractive than extending degree granting authority to the colleges or creating another university.

> The Department is very attracted to Capstone kinds of solutions. Athabasca has been very active in promoting its Capstone programs, but so far, Keyano College is the only one that has been warm to this solution. My understanding is that Grande Prairie College is very interested in a Capstone arrangement but doesn't want to do it with Athabasca University. (Deputy Minister)
>
> Medicine Hat is also looking at negotiating degree completion programs; they are talking to the University of Calgary and Athabasca but primarily with the University of Lethbridge. In fact, their focus appears to have shifted to the University of Lethbridge. (Assistant Deputy Minister, Policy and Planning)

Both respondents stated Athabasca University is "probably the most attractive university in terms of Capstone arrangements," based on their philosophy and mandate. "Their attitude is, we don't have a campus; we're going to to solve problems where they occur" (Deputy Minister). This attitude towards solving the problem was not seen to be commonly held at the University of Alberta. Some faculties at the University of Alberta were seen to be "still pretty rigid in their view about the necessity of residential education," but the Deputy Minister believed this rigidity was "beginning to shift a little bit." The University of Calgary was believed to be willing to try alternate ways of providing degree education, but were limited in such endeavors by their financial ability. "Their problems are financial; if the financial problems get solved, they will probably pursue this."

Neither respondent perceived that the addition of Capstone or brokered programs to community colleges would create a major impact on the nature of these institutions, although it would "obviously change the currently written mandate." The Deputy Minister used a metaphor to exemplify this point:

> The colleges are the small business entrepreneurs and the universities are big business. I see degree granting as being very consistent with an entrepreneurial problem-solving ethos. I would need to be convinced that adding brokered programs or Capstone programs would fundamentally change the way these institutions viewed themselves.

Establish an Accreditation Board for Public College Degree Programs

Limited discussion had occurred within the Department of Advanced Education in terms of establishing an accreditation board to assess college requests for undergraduate degree programs, recommend program implementation, and monitor college provision of such programs. The Deputy Minister expressed her concern that the universities have never been required to submit new programs to such an accrediting board.

> If the universities are now saying we need an accreditation board for degree programs in public colleges, but they don't -- it's self interest that's operating, or a status play.

The type of "control" mechanism which would be required was seen by the Deputy Minister as dependent on the kind of solution adopted and the magnitude of that solution.

> For example, if we wanted to go into a training type or occupational degree, that degree would need to be accepted for what it is. If it is credible to the employers, it does not require external control. When we set up Athabasca University, we didn't set up an accreditation board to determine if their programs were worth, and their degrees were credible ... from a policy point of view, we [just] want to be sure that students get a quality education.

Establish "Associate Degrees" in the Public Colleges

No benefit was seen from implementing a mechanism such as the Associate Degree certification (as available in the United States). The Assistant Deputy Minister, Policy and Planning stated

> It's rarely come up. It has been suggested on the odd occasion by some of the colleges. It does distinguish their degrees.
>
> My own impression is that we would be hard pressed to start talking about a two year degree. In Alberta, the view is a degree is a degree. ... We have diplomas, we have certificates, we have three and four year degrees, but there is no distinction between them. A degree is a degree. One is as worthy as the other. I don't know how the government could possibly deal with this or what the outcomes might be. A degree should stay as a degree.

SUMMARY OF THE PERSPECTIVES OF THE ADVANCED EDUCATION RESPONDENTS

The respondents from the Department of Advanced Education presented a very clear point of view on each of the data categories.

In terms of the demand and need for baccalaureate education, the respondents reported that there is a rising demand for such education which reflects the needs of the changing economy, and a rising demand for baccalaureate-prepared individuals by employers. However, the demand level was not projected to increase significantly in the near future, and there was a belief that the present university and private college enrollment capacity was sufficient to meet the demand and need in the province generally.

Demands for regional provision of such education were seen to reflect concerns with personal costs, a view that individuals should be able to remain in their home communities, and personal perceptions of difficulties encountered in moving from rural to urban areas. The special problems of natives in northern Alberta in gaining access to undergraduate degree programs, and the overwhelming needs of the native communities for individuals educated at that level were seen as requiring special consideration in considering degree program provision in the province.

The Department respondents did not believe that a transfer crisis would occur in 1990, that is, there would be adequate space in the universities to accommodate the present college university-transfer student enrollments. There was "a moral commitment" to ensure that such students are accommodated in the postsecondary system. The respondents indicated that the universities may see a need for the Department to provide additional funding in order to accommodate more students at the senior undergraduate levels.

The respondents believed that accessibility must be balanced with the fiscal realities in the province. The current provision of postsecondary education was seen as reflecting a high level of quality and accessibility, with one of the highest rates of government funding in Canada. Would Albertans be willing to increase this expenditure?

In considering the extension of degree granting authority, the respondents for the Department of Advanced Education saw a need to define the purpose of a baccalaureate degree. Such definition was seen as necessary to determine responses to the conflicting perspectives on quality in university education, that is, the need for research in such programs, the need for faculty qualified at the PhD level, and mechanisms to ensure credibility and acceptance of degrees. Overall, these respondents were not yet convinced that the requirements for high quality in baccalaureate degrees reflected in the interviews with the university respondents were necessarily applicable to all undergraduate degrees, particularly if occupation-related baccalaureate degree programs were created.

Extending degree granting capability to the public colleges was not seen as either desirable or feasible at the present time by these respondents. They reported a need to carefully assess the issue in terms of establishing and maintaining high quality and credibility in the degree programs, establishment of actual levels of need versus interest,; maintenance of all types of postsecondary education and overall, to ensure the economic feasibility and benefits of such extension.

Expanding the universities' capacity for enrollment was not seen as a feasible solution, given the respondents view that the basic issue was one of regional needs for undergraduate education and not an overall system capacity issue. The respondents highly favored the provision of collaborative, brokered, or capstone programs by the current universities as the most feasible and desirable solution to meeting regional needs for baccalaureate education. The advantages of such a solution were seen to be several: limited funding would be required; the quality of programs would be maintained; and there would be very limited impact on the roles and mandates of the community colleges.

Establishing a form of accreditation board to oversee degree granting by the public colleges or establishment of a new system of Associate Degrees to be offered by the community colleges was not seen as a viable, feasible, or desirable option by the respondents.

The issue of extending degree granting capability to the public colleges was seen by these respondents as a significant issue in the province, and one which the Department of Advanced Education was currently examining. However, no urgent need was seen to provide solutions to the issue; in fact, the overriding need was identified as a cautious, complete examination of the issue and the ramifications of any proposed solutions.

CHAPTER 7
DATA ANALYSIS

Chapter 7 summarizes the major findings of the data collection process described in Chapters 4, 5, and 6. This summary of findings is reported according to the major data categories established earlier in the thesis. Where the findings reflect common perspectives or viewpoints, or where the findings are contrary to the common perspectives described in the Chapter 2 literature review, this is indicated.

The second section of the chapter describes models through which degree programs could be extended in Alberta, and the analysis process used to determine the acceptability of implementation of these models is presented. This analysis includes a description of a rating scale developed to assess the degree to which twelve factors identified as directly affecting the acceptability and feasibility of the proposed policy solutions. The rating scale is then applied to the models in several different ways to determine the most acceptable model. The chapter concludes with a discussion of the model identified as the most acceptable, that is, provision of regional degree programs through capstone or collaborative models of combined university-college programs.

PERSPECTIVES ON THE NEED TO INCREASE PROVISION OF UNDERGRADUATE PROGRAMS

Demand for Baccalaureate Education

All respondents in the study stated there is a steadily increasing demand for baccalaureate education within the province. Participation rates and enrollment levels in university programs have steadily increased since the early nineteen-eighties. The Department of Advanced Education projects that enrollment in university programs will remain stable at approximately 50,000 full-time students until 2003, at which time enrollments will increase to approximately 64,500 (Alberta Advanced Education, 1988, p. 9). These projections are based on expected rates of participation in university programs by individuals aged eighteen to twenty-four year.

Both the college and university respondents are skeptical of the accuracy of the enrollment and participation predictions made by the Department of Advanced Education. This skepticism can be attributed to the projections made by the Department in 1980 forecasting a drop in university enrollments and an increase in technical and career program enrollments during the next decade. The current projections made by the department are considered questionable particularly by the college respondents. The projections are not seen to reflect the Canada-wide projections of university enrollment levels, nor are the projections believed to include the significant increase in the numbers of students over the age of twenty-four enrolling, and likely to enroll, in undergraduate programs. The Department contention that a booming economy and strong economic growth in the province is "the most potent factor capable of decreasing demand for degree programs" (p. 7) is supported by only one college respondent. All other college and university respondents believe the state of the economy will have little effect on the demand levels. The current Canadian participation rates and projections of increasing participation are seen as a more accurate indicator of the future level of demand for degree programs in Alberta than the projections of the Department of Advanced Education by most institutional respondents.

Factors Affecting Demand

The factors identified by the study respondents as creating the rising demand for baccalaureate education reflect the four major factors identified in the literature review. The impact of the change from an industrial to an information-based economy on manpower requirements and national and provincial economic competitiveness in world markets has created both a demand and need for increased numbers of individuals prepared at the baccalaureate level. Education at a baccalaureate degree level is seen as providing the most flexible and adaptable education to meet the changing economic requirements, and ensure career stability and success.

A second factor contributing to the demand is the rising level of education within the communities. This factor is seen as particularly true in the communities in Alberta which have had community colleges for a substantial period of time.

The third major factor contributing to the demand is the social value attached to baccalaureate education, particularly the public perception of the enhanced employment and career development opportunities created for individuals with such qualifications. In Alberta, the interest in and demand for baccalaureate education may be particularly affected by this factor. Historically, Albertans have consistently expressed a viewpoint that university education is the most desirable postsecondary educational level to achieve. The final factor identified both in the literature and by several of the study respondents is the growing demands by communities outside of the major urban centers for equitable provision of educational services within all regions of the province. Off-campus and distance education provision of baccalaureate programs has been very limited in Canada, and the location of universities in the major urban centers has resulted in a significantly higher proportion of urban residents obtaining baccalaureate degrees than non-urban residents. This inequity in educational opportunity is increasingly seen as unacceptable.

Funding restraints, and the perceived need for cost-effectiveness in postsecondary education are seen as having direct effects on the ability of the universities to meet these demands. The level of demand and need for university education raises questions as to whether the demand should be accommodated and, if so, to what level and through what kind of delivery systems?

System Capacity to Meet the Demand

The institutional respondents claim that the present capacity of the universities is not sufficient to meet the demand for baccalaureate degree programs. Primarily, the capacity of the institution is related to enrollment potential based on current funding levels. The college respondents claim that only half or less of the qualified applicants to their programs can presently be admitted. In addition, the controls on enrollment established at the University of Calgary and the University of Alberta are believed to have prevented enrollment of a large number of students. No facts are available as to whether students refused entry to these universities were enrolled in other university programs in the postsecondary system.

Current Enrollment Levels

The Department of Advanced Education contends that the current capacity for undergraduate program enrollment is sufficient to meet the demand over the next few years in an aggregate sense. The assumption of the Department of Advanced Education is that full-time enrollment numbers are the major factor impacting on institutional capacity. Assuming that the most current full-time enrollment statistics (1987-88) reflect present institutional capacity, the system can accommodate approximately 60,000 students in undergraduate degree programs. The four universities can accommodate approximately 54, 500 students in undergraduate university programs. The private colleges accommodate an additional 2200 students; college university-transfer programs accommodate approximately 4000 students, with the largest enrollments at Red Deer College, Mount Royal College, and Medicine Hat College.

Under current funding arrangements, the University of Alberta and the University of Calgary will maintain their undergraduate enrollments at the 1988 levels. The University of Lethbridge is planning to expand its enrollment capacity to approximately 3500 students in 1989-90 from the 1988 level of 3100 students. Athabasca University received funding in 1989 to increase both the number of degree programs provided, and to expand its offering of degree programs through capstone model arrangements with the public colleges. No projections of potential enrollments are available for this expansion, but one could conjecture that an additional 1000 students could be accommodated through this mechanism. Approximately 62,000 students will be accommodated when these planned expansions are taken into account.

Potential Expansion of Enrollment Capacity

With additional funding, the capacity of the University of Lethbridge could be increased to a maximum of 5000 students, and the University of Calgary to 25,000 students in total, potentially providing an additional 2500 to 3000 more undergraduate placements. The private colleges have also indicated their desire to expand their enrollments. The extent to which such expansion will take place is somewhat dependent on student interest, and supplementary funding. Further enrollment expansion at the University of Alberta, Athabasca University, and the public colleges could also occur. The projected needs for 64,500 places in 2003 would be met or exceeded under these conditions.

Transfer Student Enrollment Pressure on the Universities

The number of students requesting transfer to the universities from college university-transfer programs increased by 139 percent between 1981 and 1988. All institutional respondents believe that a transfer crisis will occur in 1990, that is, the existing universities will not be able to accommodate the numbers of college university-transfer students seeking admission to the third year of degree programs. Primarily, the concern centers on the capacity of the three traditional universities to accommodate these students. A major concern is that college university-transfer students will be unable to complete their degree programs because of this lack of enrollment spaces. A second concern is that funding requirements to expand third and fourth year programs are greater than for first and second year programs, and these funding needs may not be met.

The Department of Advanced Education believes there will be enrollment pressure, but not at a crisis level, and that the current institutions have the capacity to accommodate this demand. As well, the Department of Advanced Education states there is a moral obligation to ensure that college university-transfer students can complete their programs, and measures will be taken to ensure this.

As college university-transfer programs are predominantly two years in length, based on present enrollments in these programs, the potential exists for 2000 students to be eligible for transfer into the third year of degree programs at the universities and degree-granting private colleges in 1990. In 1987, of the approximately 50,000 students enrolled at the universities, 1200 of these students were transfers from college university-transfer programs (Alberta Council on Admissions and Transfer, 1988, p. 6). Therefore an additional 800 places in third year programs could be required in 1990, if enrollment levels in all university programs remain essentially the same, and given that all students presently enrolled in the college university-transfer programs continue on to complete their degree.

The University of Lethbridge could feasibly accommodate at least half of these individuals given the current funding and enrollment planning. Athabasca University could also accommodate a substantial number of these individuals through the capstone model programs offered at the community colleges. The private colleges could also accommodate at least some of these individuals. Dependent on the actual enrollment and attrition rates in the first two years of the undergraduate programs offered at the University of Alberta and University of Calgary, these institutions may also be able to accommodate additional college transfer students. In an aggregate sense then, current capacity to meet the transfer demand in 1990 does not appear to be a major problem.

In 1991, however, the transfer students accommodated in 1990 will be continuing into the fourth year of their programs. Three year degrees in the universities have been discontinued as of 1988. An additional 800 places (above the 1988 level) for college university-transfer students requesting transfer into third year programs would be required, if present enrollment levels in these programs are maintained. It appears unlikely that the present institutions could accommodate this demand without some additional funding to allow for increased enrollment. Given the unexpected increase in enrollments at the universities in September 1989, the capacity issue may become severe in 1991 and subsequent years.

The capacity problem, however, cannot be answered simply by expansion of enrollments and increases in funding. Determination of a reasonable balance between increased accessibility and government expenditure on postsecondary education, is seen as a necessity by the Department of Advanced Education and most respondents. The role of Athabasca University in relationship to the role of the three other universities in increasing access to degree programs is unclear to the institutional respondents, and is an underlying issue in assessing community perceptions of reasonable access to degree programs. Expanding the enrollments in the private colleges is seen by most respondents as having little impact on resolving the access issues, but is seen as a required consideration in determining program availability by the Department of Advanced Education respondents. Maintaining quality while attempting to accommodate large numbers of students is a concern of all respondents. Finally, there are specific perspectives in Alberta on the prestige of institutions, the need for preferential regional access to specific universities,and the need to increase provision of complete degree programs outside of the existing universities. These Alberta perspectives impact significantly on the development of acceptable solutions to meet the demand for baccalaureate education in the province

Regional Perspectives of Undergraduate Program Provision

The history of postsecondary institutional development in Alberta, and the data collected during this study, demonstrate that Albertans strongly believe there should be access to university degree programs within their home regions. Albertans have consistently expressed their belief that economic and social development and benefits are increased for both individuals and the community when university programs are offered in that community. In addition, Albertans have a firm belief in equality of opportunity, and in equity of service provision, particularly in publicly-funded enterprises.

Beginning with the establishment of the University of Alberta in Edmonton, and the subsequent establishment of the University of Calgary, and the University of Lethbridge, communities outside these major urban areas have expressed their belief that such centralization of university programs in fact created inequitable access within the province. Provision of non-university postsecondary education in the various regions has not altered this perspective to any substantial degree. Equation of a particular university with general regions of the province did occur, that is the University of Alberta is considered the regional university for the north and central regions of the province; the University of Calgary the regional university for the central and south regions; and the University of Lethbridge for the distinctly southern region. Overlaps in perceptions of the regional university are obvious; and the University of Alberta is still considered the "provincial" university which should be accessible by all Albertans. Athabasca University is not perceived to meet the needs of any specific regional area, but is most commonly viewed as meeting needs for university programs for individuals in areas where access to the traditional universities is not possible.

The rationale of the communities outside the major urban areas in proposing provision of university degree programs in their regions has remained essentially the same since the nineteen-sixties. There is a pervasive belief that community colleges should meet the needs of their communities. Variations in community needs are seen to necessitate the creation of unique provision of educational services by each community college. One model for the types of programs provided by the community colleges is the province is not seen as appropriate. Contrary to the strongly held beliefs of the university respondents that degree program provision results in creation of a university, at least three of the college respondents believe that both undergraduate degree programs and non-university programs can and should be offered by their community colleges. Provision of both types of programs is seen as the most effective way of meeting the particular community needs.

Regional Perspectives on the Four Universities

The historical development of the university education system in Alberta has also contributed to distinct community perceptions of the prestige of each university, and the credibility of the degrees awarded by each university. The University of Alberta continues to be viewed as the most prestigious university, offering highly credible degrees. The University of Calgary is perceived as offering highly credible degrees, and is steadily gaining prestige as an institution. In part, the credibility and prestige accredited to this institution may be a reflection of its initial establishment as a branch of the University of Alberta, and its development in the multi-university mode since that time. The University of Lethbridge has slowly gained in prestige and credibility of degrees awarded, particularly in the perceptions of Albertans outside the southern region of the province. Athabasca University is still struggling to establish credibility in both programs and degrees offered.

There is a continuing public concern with the size of the two major universities; the effects of further enrollment growth within these institutions; and the possible control of enrollments by all universities. There is an evident growing belief that smaller institutions provide a better quality education than do larger institutions, through provision of more individualized teaching and services to students. The success of the community colleges in providing university-transfer programs, and their acceptance and credibility within their communities, contributes to a continuing belief that the colleges can and do provide equivalent (or better) education to that in the universities. The community colleges also provide direct instruction to the students; a concern with Athabasca University is the use of distance education techniques and technologies which are not perceived as being effective teaching/learning methods in many of the outlying communities. The more liberal admission and residency requirements of the community colleges are seen to foster both access to, and successful completion of programs.

Equity of Access, Educational Opportunity, and Impact on Regional Development

The distance of the community from the major cities is seen as directly reducing access to degree programs, and therefore creating inequitable opportunities in postsecondary education in the province. This factor has been raised to one of major importance in the nineteen-eighties due to the increasing numbers of mature students interested in pursuing degree programs. The personal difficulties encountered, the inability of these individuals to leave their families and jobs, and the high personal expenditure necessitated by relocation, are all seen as increasing the inequity. The limitation of enrollment possibilities to Athabasca University programs is not seen as providing equity in access.

As the cities grow in size, individual perceptions of difficulties in adjusting to living in the city, and completing a program in a large institution, are becoming more pronounced. This is seen as particularly true of the native communities in the northern part of the province by the Department of Advanced Education, but is a perception of institutional respondents in the regional areas as well. When combined with a low rate of return of individuals who do pursue degree education outside the community, a shortage of professional people continues in these communities. This is seen as impacting greatly on the quality of life and socio-economic development within the community.

Impact of the Private Colleges

Regional access issues are also made more complex by the distribution of the private degree granting colleges in the province. All three of the accredited private colleges are located in the greater Edmonton area, and provide alternate access to individuals living in this area. Such alternate access is not available elsewhere in the province. For example, in the Calgary area, the only access to university programs without leaving the greater city area is through the University of Calgary, and Athabasca University. The University of Lethbridge may be seen as an alternative, but the distance to Lethbridge prohibits commuting.

Furthermore, the private colleges are not perceived to be equitable alternatives to the public universities by the majority of the Alberta populace. These institutions are seen as meeting the needs for specific denominational groups, and as providing liberal arts education with a particular religious focus. Therefore, although these colleges may have the capacity to increase their enrollment, and the programs and degrees offered by these colleges are fully accepted by the public universities, the colleges and their programs do not have a high level of acceptance or credibility with the general public.

The authorization of undergraduate degree granting capability for three of the private colleges has strengthened the regional community beliefs that public colleges should also receive such authorization. The similarities of development of university programs and services in both types of colleges; the similar success of both types of colleges in providing university-transfer programs; and concerns with equity in provision of such programs throughout the province strengthen this belief.

Maintaining Quality and Standards in Baccalaureate Education

Maintaining quality in baccalaureate programs, and degree credibility with the general public and the higher education community, is seen as an essential element in considering extension of undergraduate degree programs by all study respondents.

Significant disagreement exists as to what specific factors are necessary to ensure quality in baccalaureate programs. This disagreement in part reflects differing views of the purposes of baccalaureate degrees. In a simplified form, the argument centers on whether a baccalaureate degree program should focus primarily on preparation for work force entry, and development of knowledge and skills which provide a basis for adaptability to societal and occupational changes; or should provide education which focuses primarily on advancement of knowledge in society, and provides a basis for further education at the masters' and doctoral levels. The predominance of one view of the purpose of baccalaureate education, directly affects the expressed beliefs as to the necessity for residency requirements, faculty qualifications, extent of facility and equipment requirements, faculty involvement in research, and the need for controlled or open access to such programs. The extremes of each point of view are illustrated in Table 3.

Library and Laboratory Requirements

All respondents agree that access to adequate library resources is an essential element for quality in undergraduate programs. Whether an extensive library is required on site, or whether access to an extensive library collection through computerized data bases and an established inter-library loan system is sufficient, is an underlying issue. All respondents agree that appropriate laboratory and clinical facilities must be available to

Table 3

The Effect of Differing Definitions of the Purpose of Baccalaureate Education on Requirements for Program Quality

	Preparation for work entry	Advancement of Knowledge
Access	Open	Restricted
Residency	Not required	Required
Faculty Qualifications	PhD preferred but Master's level acceptable	PhD with research experience
Facilities & Equipment	Appropriate to meet current knowledge & skill requirements	State of the art
Library Resources	Basic resources and access to more extensive collections	Extensive collection and access to other data bases
Research	Not necessary; if done should be applied research	Essential
Teaching Focus	Primary element	Equivalent element to research
Student/faculty contact	Essential for majority of program	Essential for majority of program
Credibility	Acceptance by employers & public. Higher education institutions acceptance if possible	Acceptance by public and other higher education institutions
Responsibility for Standards	Institution and government	Universities
Funding	Required to maintain effective teaching, and to update facilities and equipment	Required to support research, maintain teaching load at a level which allows faculty to participate in research; and maintain facilities at a state of the art level.

support the baccalaureate degree programs, and that this element should be a major factor in determining what programs will be offered in what institutions. A major concern of the university and government respondents is that duplication of facilities will occur; the college respondents state that they will only offer such programs for which facilities already exist, or which require minimal upgrading.

Faculty Qualification Requirements

The majority of institutional respondents also agree that faculty qualified at the PhD level are necessary to maintain program quality. Differences in opinion do exist as to whether or not faculty qualifications should also include substantive experience in research. A minority of the respondents questions if PhD qualified faculty are necessary if the degree program is directed primarily toward work force entry knowledge and skills. The university and government respondents have a major concern with the ability of institutions to recruit and retain faculty qualified at the PhD level, given the projected nationwide shortage of such individuals over the next decade. All but one of the college respondents believe they will have no difficulties obtaining qualified faculty. Whether these assessments of the availability of potential faculty is based on recruiting faculty prepared at the PhD level, or at the master's level initially, is not specified clearly by these individuals.

Research Activities of Faculty

The major controversy in the province is whether or not there is a need for faculty to be involved in research as a major quality element in baccalaureate programming. The university respondents believe faculty involvement in research is essential to ensure students in baccalaureate programs are provided with "state of the art" knowledge; enhance development of an inquiring mind; and provide a needed foundation for further study and development of research skills. This belief in the importance of exposure to a research environment also underlies many of the beliefs regarding residency requirements in degree programs; and the skepticism regarding the ability to provide quality off-campus programs. Two of the college respondents support the exposure to research as a necessary element in the third and fourth year of baccalaureate programs. The majority of the college respondents perceive quality teaching as the major element needed to ensure quality in baccalaureate programs. Good teaching will result in students being exposed to current research findings. These respondents question the teaching quality, and teaching interest, if the major focus and interests of faculty lie in conducting research. Limited faculty involvement in research, particularly in applied research, is supported in the colleges, as a means to ensure program acceptability with employers, and ensure program content reflects current knowledge and practices. The Department of Advanced Education respondents state the need for faculty involvement in research is clearly dependent on the purpose of the baccalaureate degree, but add that providing funding for research in all postsecondary institutions in the province is not feasible.

Extent of Faculty-Student Contact

The majority of the respondents also agree that faculty-student contact is essential for quality baccalaureate programming. Institutional capacity, and availability of human resources, is seen to limit the ability of the universities to provide quality off-campus programs with acceptable faculty-student contact. Perceptions of lower quality and credibility of programs provided through distance education are common within the institutions and communities. Distance education is seen as an appropriate method for some forms of baccalaureate education, provided adequate measures are adopted to ensure faculty-student direct contact; but in general, the institutional respondents, with the exception of Athabasca University, believe the majority of courses in a baccalaureate degree program should be provided through on-site instruction.

Need for University Control of Degree Programs

The university respondents are clear in their expressed desire to retain control of baccalaureate education in the province, based on a concern with maintaining quality, and credibility of degrees. These respondents believe that loss of university control could readily result in creation of a second class system of baccalaureate degree provision in the province. The issues in extending baccalaureate program provision for the universities involves adequate funding, providing a balance between accessibility and maintenance of standards, and ensuring that any baccalaureate degree awarded in the province will be an acceptable credential for further study in universities throughout the world. The majority of the college respondents do not believe that credibility and degree acceptance is necessarily dependent on continuing university control of baccalaureate programs.

PERSPECTIVES ON THE DESIRABILITY OF INCREASING PROVISION OF UNDERGRADUATE DEGREE PROGRAMS

All institutional respondents agree that some increase in accessibility to baccalaureate programs must occur, based on the demand for such programs, and the need for increased numbers of individuals prepared at this level in the province. The Department of Advanced Education respondents do not support the need for increasing baccalaureate program enrollments throughout the system, but do support increasing access to such programs to meet regional needs and demands. All institutional respondents believe that a need for regional provision of degree programs exists in Alberta.

Perspectives of Desirability in the Literature

Proponents of extending baccalaureate program provision through regional institutions believe such a system is an economical way to meet regional and provincial needs, encourages diversity in postsecondary institutions, and brings a needed element of competitiveness to the postsecondary system. Providing undergraduate education on a regional basis is seen as a cost-effective way to decrease the enrollment pressures on the universities, and thereby allow these institutions to focus on development of excellence in research and research-based education.

Those authors opposed to extension of baccalaureate program extension do not believe university degree programs should be easily accessible. Large numbers of students are seen to necessitate establishment of lower standards and requirements for successful course completion, and professors are forced to reduce their research activities in order to meet the teaching requirements. This results in provision of a low quality degree programs. Despite research findings which indicate there are no significant differences in academic outcomes, content, laboratory experiences, or standards set in programs offered by a university on-campus or off-campus, those opposed to further extension believe off-campus programs are, or will rapidly become, lower quality programs. The lack of adequate library resources, equipment and facilities to support baccalaureate programs outside the universities; the lack of sufficient numbers overall, or numbers of faculty interested in providing programs off-campus; and the strong possibility of insufficient numbers of adequately qualified students are all seen as major detriments in considering such program provision. In addition, increasing the number of individuals prepared at the baccalaureate level is seen as likely to reduce the social and occupational value of this degree, and contribute to employers' seeking such qualifications for jobs which do not, in reality, required this level of education. Extending programs to regional institutions is seen as likely to result in baccalaureate degrees with a very narrow regional job-related focus; establishment of a system of prestigious/less prestigious institutions, and therefore first-class/second-class degrees; overextension of the regional institution capabilities, and result in inefficient function; and, gradual loss of diploma level career and job preparation programs.

College Perspectives of Desirability

Provision of baccalaureate programs in regional areas in Alberta is seen by the college respondents as the minimum extension necessary to maintain accessibility to degree programs at the present levels. The increasing tendency of the three traditional universities to control enrollments through admission restrictions, and through establishment of quotas in all years of baccalaureate programs is seen as increasing the need for extension of these programs. Such regional provision is also seen as one effective way to ensure college university-transfer program students can complete their degree programs. The size of the University of Alberta and the University of Calgary is of concern to many of these respondents; regional provision of baccalaureate degree programs is seen as one way to control further growth in these institutions. Some respondents believe that capacity for enrollment must be increased in the universities and degree-granting private colleges in addition to creating regional degree programs, if the postsecondary system is to meet the demand and need for such education.

Regional degree programs are seen as essential in order to meet the growing political demand for equity in provision of education, primarily to meet the needs of the expanding numbers of mature students in the regional areas, but also to increase the equitability of individual costs in obtaining such education, regardless of location. The college respondents believe that extension of baccalaureate degree programs would be most cost-effective if such programs were developed to utilize the existing facilities and human resources available in the college; limited additional funding is seen to be required. The primary need for funding would be to enhance library resources. Extending degree provision through the community colleges is seen to allow these colleges to respond to the steadily rising levels of education within their communities, and therefore more effectively fulfil their mandate of meeting community needs for postsecondary education. There is some belief that provision of regional degree programs will enhance socio-economic development in the community. The prestige element of offering degree programs is not identified by these respondents as an important factor, but based on the historical review of college interest in degree programs, an assumption can be made that prestige is a factor.

Two major constraints are evident in the college respondents' perspectives on regional degree programs: any degree offered must be accepted by the universities in Alberta; and, these degree programs cannot be offered solely by Athabasca University.

University Perspectives of Desirability

The university respondents concur that the demand and need for increased provision of baccalaureate programs, particularly the demand and need for regional provision of such programs, and a requirement to place consistently increasing numbers of college university-transfer program students in the senior years of baccalaureate programs, will necessitate extension of degree program provision, and expansion of the present enrollment capacity of the universities. The ability of the universities to increase access to baccalaureate degree programs is seen as linked to the availability of resources (both financial and human), and constrained by the necessity to ensure maintenance of standards and quality in these degree programs.

These respondents believe that extension of baccalaureate degree program provision must occur by a process which retains university control of these programs. Such control is seen as essential to maintain quality in the degree programs offered; to increase the cost-effectiveness of baccalaureate program provision; and to prevent duplication of programs and services. Regional provision of degree programs by the universities is seen to allow for incremental funding increases to enrich current university resources so that development of creative and innovative approaches to provision of regional baccalaureate degree programs could occur. There would be no necessity to expend funds to develop an infrastructure in the colleges necessary to support high quality degree programs. Program determination throughout the province could be based on assessment of both community and system needs and requirements; the credibility of the degree would be maintained within the community, and within the higher education system; and the rationality of planning for expansion or reduction in accessibility to baccalaureate degree programs would be enhanced. All university respondents support further exploration of collaborative college-university degree programs, provided funding is available for such program development and implementation. Major constraints seen by the university respondents in extending baccalaureate degree program provision are: funding; the lack of clarity as to whether Athabasca University holds the primary responsibility for provision of regional degree programs, or if the other universities hold specific regional responsibilities; determining a balance between accessibility and quality, and accessibility and economic capability of the province to support postsecondary education; and the projected shortage of university faculty prohibiting extension of such programs.

Government Perspectives of Desirability

The respondents for the Department of Advanced Education believe there are regional needs which are not and cannot be met by increasing accessibility at the universities. Extension of degree program provision to increase access must be balanced with the fiscal imperatives of the province; must include assessment of the capability of private, public, and out-of-province institutions to meet the access needs; and must result in provision of quality degree programs, and degree credibility. The cooperation of the universities in accepting programs is seen as essential.

A major constraint to development of possible solutions to increase access is that any system developed for extending degree program provision must have little or no impact on current community college mandates. Possible solutions must be fully explored and considered; a high level of confidence in their applicability and relevance in the Alberta context must be established; and assurance that the solution(s) chosen will prove valid over time are seen as essential factors in policy development.

MAJOR ISSUES AND FACTORS AFFECTING POLICY DEVELOPMENT

It is evident that the provision of baccalaureate degree education in Alberta is a policy issue which requires development of strategies to increase the provision of such education on a regional basis, and to examine the need to increase the overall capacity of the postsecondary system to meet the projected demand for such education in the future.

The major issues requiring resolution are: determining a balance between access and reasonable provincial expenditure for university education; determining ways and means to maintain quality in programs, and credibility of degrees awarded; balancing the regional view of acceptable access with cost-effective program provision; clarifying the role of Athabasca University in regional provision of degree programs; and, determining the desirability and feasibility of creating regional institutions, expanding current degree-granting institutions, developing inter-institutional degree programs, or other methods to meet the demand for university education.

The particular factors which affect policy development in Alberta include Albertan perspectives on reasonable access, equity in access and educational opportunity, the relationship of university programs to regional development; the perceptions of steadily decreasing access to the major universities; and the strong disagreements on the need to equate degree granting with universities, and quality degree programs with university control. Albertans do not view the availability of enrollment in institutions outside their home regions, or in private colleges, as an acceptable system of access to university education. Inequity is also seen in the differing levels of personal expenditure and disruption of personal life required for non-urban individuals to access university programs; and in the lack of choice in obtaining degree programs from the universities in the non-urban areas. The concentration of the universities in the major cities is seen as decreasing the ability of the non-urban communities to expand their social and economic development due to the lack of individuals prepared at the baccalaureate level. The authorization of the private colleges to grant baccalaureate degrees is seen as increasing the inequity; the regional community colleges are perceived to have equivalent quality programs, resources, and facilities to offer such programs.

IDENTIFICATION OF MODELS TO EXTEND DEGREE PROGRAM PROVISION

A number of models for extending the provision of undergraduate degree programs are identified in the literature, and were proposed by the study respondents. Most western industrialized countries have responded to the growing demand and need in the past decade by extending baccalaureate degree program provision through simple expansion of enrollments, creating new institutions, or adding degree granting capability to existing institutions. Several countries have redesigned the structure of their higher education systems in conjunction with developing responses to meet the rising demand and need for baccalaureate education. Available models can be placed into four general approaches to extending the provision of undergraduate degree programs: models to expand provision of baccalaureate programs by the existing universities; models to facilitate joint university-college provision of baccalaureate programs; models to allow public colleges to grant selected baccalaureate degrees; and models to expand baccalaureate degree program provision through restructuring the postsecondary system.

Models to expand provision of baccalaureate programs by the existing universities include expanding enrollments in existing degree granting institutions; designating Athabasca University as the sole provider of regional degree programs, and expanding its enrollment capacity; encouraging increased provision of undergraduate programs by out-of-province universities; and creating a new university.

Models to facilitate joint university-college provision of baccalaureate programs include development of university colleges within existing community colleges; developing and extending capstone and two plus two program models; developing and extending cooperative and brokered programs; and creating degree granting consortia.

Models to extend degree granting authority include upgrading selected public colleges to university status, and expanding the community college mandate to include degree granting authority in selected programs.

Models to restructure the higher education system include adapting the California Masterplan for Higher Education to Alberta; developing an external accreditation system to authorize extension of degree granting authority to institutions other than universities; adapting the Australian system of higher education to Alberta; redefining the roles and mandates of the universities to create specialized institutions responsible for specific degree programs; and decentralizing all first and second year undergraduate programs to the community colleges, with universities becoming senior undergraduate and graduate program institutions responsible for provision of such programs on both an on-campus and off-campus basis.

DETERMINING MODEL ACCEPTABILITY FOR IMPLEMENTATION IN ALBERTA

The analysis of the data collected in this study resulted in identification of twelve factors which will affect the acceptability and feasibility of implementation of any of the suggested models to expand provision of undergraduate education. These factors address the effect the model will have on:

1. increasing aggregate enrollment numbers
2. increasing equity of access

3. increasing educational opportunity
4. meeting perceived regional needs
5. funding requirements
6. maintenance or improvement of program quality
7. degree credibility
8. the overall acceptability of the model to the general public
9. overall acceptability of the model to the college community
10. to the university community
11. overall acceptability of the model to the government decisionmakers
12. the estimation of the severity of problems which may result if the model is implemented.

A rating scale was developed to quantify the acceptability level for each of these factors. A rating of "3" indicates a high level of acceptability and feasibility, that is, the requirements of this factor are perceived as met by all stakeholders. "2" indicates a moderate level of acceptance, that is the factor requirements are perceived as met by the majority of stakeholders. A rating of "1" indicates minimal acceptability to the stakeholders, that is, the requirements are met at a very basic level, and/or may only be met for a short period of time. A "0" indicates either no change from the current system ability to meet the factor requirements, or indicates stakeholder perspectives of acceptability are uncertain but not negative. A "-1" rating indicates the factor requirements are not met, and therefore it is unacceptable to the the stakeholders.

This general rating scale description was specifically defined as to the elements necessary for a particular rating for each factor. Each model could then be assessed as to its acceptability when a specific factor was applied, and on a overall rating basis by simple addition of the factor scores. A model would be determined as one hundred percent acceptable if a total rating of thirty-six were obtained and as absolutely unacceptable if a total rating of minus twelve were obtained.

Factor Rating Scale

For each of the twelve factors affecting acceptability of the proposed models, the required elements for each rating was identified. The description of the specific application of the rating scale to each factor is as follows:

Factor 1: Effect on Aggregate Enrollment Capacity:

3 the model must allow for maximal expansion of enrollment capacity in undergraduate programs, that is, potential enrollment capacity must exceed the projected need for 65,000 places in degree programs in 2003. In addition, the model must allow for incremental expansion and contraction of enrollment capacity to allow flexibility in meeting the changing levels of demand.

2 expansion of the enrollment capacity by approximately 5000 places. This reflects the difference between the current enrollment capacity of approximately 60,000 places, and the projections of the need for 64,500 places in 2003. Incremental expansion and contraction of enrollment capacity must be possible.

1 expansion of enrollment capacity by approximately 2000 places, to accommodate the projected required increase in enrollment levels necessitated by the expansion of university-transfer programs since 1988.

0 essentially the model does not change the current enrollment capacity.

-1 the enrollment capacity of the system is decreased.

Factor 2: Effect on Equity of Access

3 the model provides potentially equal access to complete degree programs regardless of individual place of residence, without affecting access to non-university programs.

2 equal access to complete degree programs is provided within distinct regions of the province; there is no effect on access to other postsecondary programs.

1 equal access to specific degree programs is provided throughout the province; no effect on access to other programs.

0 access to degree programs is essentially unchanged from the current system.

-1 access to degree programs, or to non-university programs, is decreased in one or more areas of the province.

Factor 3: Equity of Opportunity

3 the model provides potential equity in choice of programs, format of program delivery, and requirements for personal expenditure, regardless of individual place of residence.

2 equity is provided in program provision, program delivery, and requirements for personal expenditure in regional areas; choice of program, and program delivery formats, or perceptions of program quality may not be equivalent in each location.

1 access to complete degree programs is increased, there is greater equity in personal expenditure requirements; variety and choice of programs and formats, or perceptions of program quality may not be equivalent in each location.

0 essentially no changes in equity of opportunity from the current system.

-1 the model results in decreased equity of opportunity in one or more regions of the province.

Factor 4: Extent of Meeting Regional Needs

3 meets actual and perceived community needs for local provision of complete degree programs, and non-university programs

2 meets needs for local provision of degree programs and other postsecondary programs, but does not provide a local degree granting institution

1 increases the opportunities to complete degree programs in the community, or within some regions, but does not completely meet regional development needs or expectations for equity in program provision.

0 no change from the present system

-1 the provision of regional degree programs, or the provision of other types of postsecondary educational programs, is decreased from the current level.

Factor 5: Funding Requirements

3 Limited, incremental funding to enhance existing human and physical resources is required.

2 Moderate, one-time funding to upgrade existing resources, and limited incremental funding on a continuous basis is required.

1 Substantial initial funding for specific institutions, and limited incremental funding on a continuous basis is required.

0 All institutions will require moderate funding increases on an incremental basis.

-1 Substantial funding is required both initially, and on a continuous basis for all institutions.

Factor 6: Program Quality

3 The quality of undergraduate degree programs is seen as improved by both the public and higher education communities.

2 Program quality is seen as maintained at its current level.

1 Program quality is acceptable to both the public and higher education communities, but may be affected by the projected shortage in qualified faculty, and program imbalances.

0 Program quality is acceptable, but concerns may exist with the adequacy of facilities, degree of research exposure, qualifications or availability of faculty, and perceptions of the quality of individual programs.

-1 Differences in program quality between institutions is perceived by both the public and higher education communities.

Factor 7: Degree Credibility

3 Credibility of all degrees awarded in the system is maintained and/or improved

2 The degrees awarded are credible with the higher education community and the public; some variations in perceptions of degree credibility or prestige may exist.

1 Degrees awarded are initially acceptable to both the higher education community and the public; credibility of the degree will be somewhat dependent on the effects of time.

0 Variations in the perception of the credibility and acceptability of degrees awarded by individual institutions can be expected.

-1 Degrees awarded outside of the universities are not seen as credible or acceptable.

Factor 8: Acceptability to the Public

3 the public perceives the model provides equitable access and equitable opportunity, maintains degree quality and credibility, utilizes existing resources and facilities, and can be implemented at reasonable cost.

2 the model provides an acceptable level of access and equity of opportunity, maintains degree quality and credibility, and can be implemented at reasonable cost.

1 the model increases access at reasonable cost, but does not fully address needs for equitable opportunity, and regional development; is seen as a basically acceptable solution.

0 the model might be acceptable as an interim solution; but is not seen as a fully acceptable way to increase provision of baccalaureate programs.

-1 the model is unacceptable.

Factor 9: Acceptability to the Universities

3 the model maintains university control of degree programs; maintains present standards; expands and enhances existing university resources; maintains a balance between access and quality; and has limited impact on university operations.

2 the model maintains university responsibility for or control of degree granting programs; creates limited mandate changes for the universities; enhances university resources and capabilities; maintains quality standards; and maintains balance in university operations.

1 the model creates acceptable mandate changes for the universities; is perceived as enhancing university capabilities, maintains quality in degree programs, but may create some internal or system difficulties.

0 the model creates substantive mandate changes and/or budget reallocation issues; or is seen as requiring an unwarranted level of funding; would create some internal and system problems, but is perceived as maintaining degree quality and credibility.

-1 the model is unacceptable.

Factor 10: Acceptability to the Colleges

3 the model meets the identified regional needs; has limited or no impact on general college operations; enhances college resources and facilities; maintains quality and credibility of degree programs; and allows for college autonomy and involvement in program selection and design.

2 the model meets the regional needs; has limited or resolvable impact on college operations; enhances college facilities and resources; allows the college some choice in extent of involvement in program selection and design; and is possible to implement at reasonable cost.

1 the model meets the regional needs; maintains college operations; allows the college to act as a degree program facilitator; but is seen as a high cost alternative, with limited college choice in program or design.

0 the model reflects limited changes to the present system, restricts college involvement and choice in provision of degree programs; or is seen as a high cost alternative, or would create internal problems for the college.

-1 the model is unacceptable.

Factor 11: Acceptability to the Government

3 limited or minimal increases in funding are required; quality of programs and credibility of degrees is ensured; regional needs for increased access and equity in program provision are met to a substantial extent; there is limited or no impact on community college or university mandates and operations; and cost-effectiveness is maintained.

2 limited funding increases are required; regional needs are met at an increased level; quality and credibility of degrees are maintained; there is limited impact on community college and university mandates and operations; and cost-effectiveness is maintained.

1 acceptable funding increases are required, there is an increase in degree program provision in selected regional areas; program quality and degree

credibility are maintained in the public perception; cost-effectiveness is maintained; some internal conflicts may result.

0 limited changes are initiated in the ability of the system to meet regional needs; significant funding is required at least initially; degree credibility or inter-institutional conflict appears likely to develop or continue; some change in mandates is necessary; some internal or system problems may develop; cost-effectiveness issues require resolution.

-1 unacceptable due to a high funding requirement, or major changes in institutional mandates, or loss of educational service to the regional areas, or uncontrolled duplication of programs and services, and/or public non-acceptance of the model.

Factor 12: Level of Potential Problems if Implemented

3 Few or no potential problems or negative outcomes of implementing this model can be identified.

2 One or two potential problems or negative outcomes which are seen as resolvable can be identified.

1 Problems which may require negotiations or further policy directives to resolve exists, but the positive outcomes of implementing the model are seen as beneficial.

0 The benefits and problems of implementing the model are equally weighted.

-1 The number of problems exceed the potential benefits of implementation.

ANALYSIS OF MODEL ACCEPTABILITY

Basic descriptions of each model, its perceived advantages and disadvantages, and significant reactions of the study respondents to the model were identified. Each model was then assessed through application of the factor rating scale. The analysis of the first model, expand existing university and private college capacity for enrollment, is described in text. Each of the other models is described briefly, the major advantages and disadvantages of the model outlined, and the application of the rating scale and key information concerning this application presented in tabular form.

Models to Expand University Provision of Baccalaureate Programs

1.1 Expand Existing University and Private College Capacity for Enrollment

In this model, all universities and the private colleges would receive increased funding to support planned increases in undergraduate program enrollments. Funding and enrollment increases could be on an incremental basis, reflecting the known or projected demand and need levels for each academic year. The advantages of this model are that the system of postsecondary education in the province remains unchanged, and therefore current standards, quality, and degree credibility are maintained; adaptability of funding levels and enrollment capacity to reflect changing demands and needs for baccalaureate education is possible on a year to year basis, and therefore cost control is possible. The disadvantages of this model are that institutional long range planning becomes impossible; the potential exists for funding to be directed towards programs of high demand, which may result in program imbalances within the universities; determining recruitment and allocation needs for faculty is extremely difficult; access may be increased on a very uneven basis throughout the province based on the physical ability of each university to further increase enrollments; and it likely decreases the possibility of universities, other than Athabasca University providing off-campus degree programs in regional areas.

Support for this model is evidenced by the respondents of the traditional universities, and by two of the college respondents. The other institutional respondents believe that increasing enrollment capacities at the universities should be considered only in conjunction with other policy solutions to meet the needs for baccalaureate education. The government respondents believe this would be the least costly solution, the most acceptable solution to the universities, but would not adequately meet the real needs for increasing access in the province. Most respondents see this as only a temporary solution based on the limited expansion possibility in the universities. As demand for enrollment increased, alternate policy solutions would be required to accommodate the demand.

Effect on overall enrollment capacity: Implementation of this model would result in an probable maximal increase of 5000 places in aggregate enrollment capacity, sufficient to meet current and projected needs for baccalaureate programs for the next decade. Rating 2.

Effect on Equity of Access: Overall access would be increased by this model. Given the belief of the University of Alberta that it cannot expand to any great extent beyond its present level of undergraduate students, access to this university would remain essentially the same as it is currently. This potential inequity in access for individuals in the Edmonton and Northern regions could be moderated by the increased access provided by the private colleges and Athabasca university in these areas. Rating 2.

Effect on Equity of Educational Opportunity: Equity of educational opportunity is increased through the increased access to baccalaureate programs in the traditional universities, and the increased ability of Athabasca university to provide regional programs. Essentially, the current concerns with inequity in choice of university and program, relocation requirements, and personal expenditure requirements remain unchanged from the current system. Rating 0.

Extent to which Regional Needs are addressed: The ability of the current system to respond to regional needs is essentially unchanged in this model, but may be affected if the traditional universities decrease their provision of off-campus programs in response to increased enrollments on-site. Rating 0.

Funding Requirements : This model is seen as most economical way to increase provision and allows for incremental, and adjustable funding requirements. Rating 3.

Program Quality: Baccalaureate programs would continue to be offered with the same standards as currently exist. Program quality may be adversely affected if the universities are unable to recruit adequate numbers of faculty to continue effective class sizes, and maintain the balance of faculty teaching responsibilities and research. Rating 1.

Maintenance of Degree Credibility: All degrees awarded would have the same credibility with the public, and other higher education institutions, as currently exists . Rating 3.

Acceptability to the Public: This solution may be initially acceptable to the public as an immediate response to the perceptions of decreased access to baccalaureate programs, but is likely to be acceptable for a very limited time period. Increasing the capacity of the private colleges will have little effect on public perceptions of equity and access, due to the substantially higher tuition fees associated with these colleges, and the public perceptions of the "specialized" nature of these institutions. Expanding the capacity of Athabasca University to offer programs will only partly meet the public perceptions of equity. This model then does not adequately address the concerns of the public regarding the need for equity in educational opportunity and services; the public perceptions of reasonable and equitable access; the belief that smaller institutions provide higher quality education which can better meet the needs of undergraduate students; or the belief that regional social and economic development would be enhanced by local provision of baccalaureate programs. Rating 1.

Acceptability to the Universities: This model is highly acceptable to, and strongly supported by the university respondents, provided that the current university control of budget allocations within the institution remains. Rating 3.

Acceptability to the Public Colleges: This model would be supported by the public colleges as one policy solution, in combination with other solutions. The model would be seen as an acceptable immediate solution to the current enrollment and transfer problems, but would not be acceptable as the only long term solution. Rating 0.

Acceptability to the Government: Partial expansion of enrollment capacity in selected institutions is acceptable to the respondents of the Department of Advanced Education, but expansion of enrollments in all existing universities and private colleges is not seen as a politically acceptable response to the needs and requirements for baccalaureate education in Alberta. Rating 0.

Potential Problems in implementing this model: Determination of appropriate levels of funding to support enrollment increases, and determination of whether enrollments should be increased on a general level, or in specific disciplinary programs, will be major issues, and likely to cause conflict between the institutions and government agencies. Determination of needs for, and recruitment of faculty to support the expanded enrollment, will create internal difficulties for the universities and colleges. The physical space and resource limitations of the current institutions will limit the extent of possible enrollment increases, and may affect the provision of off-campus programs by the traditional universities; internal conflicts as to the effect of increased enrollments on program quality are likely to increase, and affect the willingness of individual faculties to further increase enrollments; and the focus of the institutions may be increasingly placed on undergraduate education, leading to a decline in the quality of graduate programs, and research conducted within the institutions. Rating 0.

Total Rating Score: 15

1.2 Designate Athabasca University as the Sole Provider of Regional Degree Programs

In this model, the traditional universities and private colleges would no longer be expected to provide off-campus programs. Athabasca University would hold responsibility for development and provision of all baccalaureate programs in all communities in which neither a university or private college is located. The advantages of this model are that it clarifies the mandate of Athabasca University, utilizes and allows for expansion of the existing human and physical resources of Athabasca university in an cost-effective manner, provides the potential for provision of baccalaureate programs in all areas of the province, and allows the traditional universities and private colleges to concentrate on on-site programs, potentially increasing the cost-effectiveness within those institutions. The disadvantages of this model are that the acceptance by the public may be quite limited; the human and physical equipment resource requirements may be substantial; the growth and development of Athabasca University as a full university actively involved in research may be hampered by the required focus on teaching and management of student learning; implementation of the model could contribute to the development of insularity by the other institutions offering undergraduate education; and development of public and higher education community perceptions of first class, and second class institutions is a likely outcome.

Table 4

Application of Rating Scale to Model 1.2

Total Rating Score: 12

Rating Factor	Score	Comments
Overall Enrollment Capacity	2	Current and projected needs substantially met
Equity of Access	1	Equity in access to specific baccalaureate programs

Table 4 Continued

Equity of Opportunity	1	Access improved. No need for individuals to relocate. Choice of university limited: Decreased if program choice limited, or programs offered primarily as distance education.
Meeting Regional Needs	1	Meets needs of adult students and demand for local provision of programs. May not provide program equity; lack of local institution may be viewed negatively.
Funding Requirements	3	Limited, incremental funding to expand AU physical and human resources, and provide or upgrade community facilities.
Program Quality	0	Current standards maintained if resources are adequate.
Degree Credibility	1	Maintains current credibility of AU degrees. Could be increased by increased enrollments in these programs, and success of graduates.
Acceptability to the Public	0	Unlikely to be acceptable in regional communities due to concerns about AU programs, and lack of regional access to traditional universities.
Acceptability to Universities	0	Other universities may object to loss of regional service role.
Acceptability to Colleges	-1	Limitation to AU programs not acceptable to the majority of college respondents.
Acceptability to Government	2	Acceptable extension of AU mandate but politically not acceptable to regional communities.
Potential Implementation Problems	2	Minimum requirements for costs-effective program provision e.g. number of students, equipment and space needs, human resource availability must be established; potential to strain resources of AU; lack of public interest in such programs; difficulties in recruiting and retaining faculty.

1.3 Expand the Capacity of the Traditional Universities to Provide Off-Campus Programs

In this model, the traditional universities, as well as Athabasca University, would receive increased funding for the purpose of providing off-campus baccalaureate programs in communities without universities or accredited private colleges. The advantages of this model are that it addresses the expressed needs of the communities for access to differing university programs, it provides a separate source of funds for such programs, and therefore does not directly impact on the universities' ability to provide on-site programs, and the quality of the program, and credibility of degrees can be assured by participating university. The disadvantages of this model are the potential for internal conflict within the universities as to staff assignments to on-site and off-site programs; the potential for reduced research involvement of faculty involved in off-campus programs; the high cost associated with transporting faculty on a frequent basis to the regional areas, or in developing distance education techniques; and the potential for conflict between degree-granting institutions in determining which institution will offer programs in which areas. Perceptions of lower quality degrees being offered off-campus may be heightened, and indirectly affect selection of such individuals into graduate programs.

Table 5
Application of Rating Scale to Model 1.3
Total Rating Score: 17

Rating Factor	Score	Comments
Overall Enrollment Capacity	2	Current and projected needs substantially met.
Equity of Access	2	Equal access to complete degree programs
Equity of Opportunity	3	

Table 5 Continued

Meeting Regional Needs	2	All identified needs met with exception of physical location of degree institution in community. May not be met if universities do not provide programs seen as most needed by the community.
Funding Requirements	0	Higher level of funding required than in previous two models. Incentive funding for faculty in traditional universities may be necessary.
Program Quality	1	Maintained by individual universities
Degree Credibility	3	
Acceptability to Public	2	Highly acceptable provided adequate numbers of programs reflecting community interest were offered.
Acceptability to Universities	0	Acceptable in maintenance of university control. Exclusionary funding may not be acceptable.
Acceptability to Colleges	1	Seen as creating unnecessary level of expenditure. Concerns regarding determination of program provisions, and frequency of program offerings.
Acceptability to Government	1	Potentially acceptable in ability to meet regional needs. Funding and potential inability to recruit faculty for such programs may lessen acceptability.
Potential Implementation Problems	0	Approval process in universities; potential for variance in provision of programs by faculties and institutions; availability of faculty; perceptions of lower quality in the higher education community; establishment of minimum requirements for cost-effective program provision may reduce implementation and increase community frustration.

1.4 Encourage the Provision of Undergraduate Programs by Out-of-Province Institutions

Although access to baccalaureate programs could be increased by this model, specific regional needs could be met if suitable programs could be arranged, and there is no government funding required for these programs, the personal cost expenditure for prospective students is seen by all institutional respondents as creating enormous inequity in educational opportunity within the province. Regional needs could be satisfactorily met in terms of types of programs offered, due to the marketing base of most of these programs. . The quality and credibility of the programs and degrees offered is dependent on the institution, but both the public and institutional respondents see these programs as less acceptable and credible than programs offered by Albertan institutions. One particular issue may be the the perceptions of the professions and occupations in the province as to the quality and credibility of these programs. For example, Gonzaga university is currently offering Masters in Education programs in the province. Students completing this program are granted only 1.5 years of academic credit (and corresponding salary increases) by the Alberta Teachers' Association ; students completing a Master's of Education program at an Alberta university are granted 2.0 years of academic credit. Programs will only be provided by these institutions if sufficient numbers of interested students enroll; and therefore access and equity of opportunity may be only an illusion.

Table 6

Application of Rating Scale to Model 1.4

Total Rating Score: 3

Rating Factor	Score	Comments
Overall Enrollment Capacity	1	Increased; dependent on sufficient numbers of individuals enrolling in these programs
Equity of Access	1	increases regional opportunities to enter programs

Table 6 Continued

Equity of Opportunity	1	enrollment possibilities increased; tuition costs increase inequity, but may be moderated by reduction in personal relocation costs.
Meeting Regional Needs	1	Provides on-site programs based on student interest. May not meet quality and credibility requirements, does not meet perceived need for local institution.
Funding Requirements	3	No government funds required.
Program Quality	-1	American programs generally perceived as being lower quality.
Degree Credibility	0	Degree may not be recognized by higher education and professional communities.
Acceptability to Public	0	Dependent on availability of other options, and willingness of programs to meet regional needs. Quality, credibility, and cost major factors affecting.
Acceptability to Universities	-1	
Acceptability to Colleges	-1	
Acceptability to Government	0	Seen as one option but not a total solution
Potential Implementation Problems	-1	Difficulties between public expectations and necessity for cost-effective program provision; non-acceptance of degrees by Alberta universities and professions.

1.5 Create a New University

This model is not supported by any of the study respondents as a viable policy solution in the foreseeable future. Creation of a new university is seen by all respondents as incurring enormous costs which cannot be rationalized in the current economic climate, particularly given the availability of extensive postsecondary facilities and services in the province. Four of the institutional respondents believe that creation of a fifth university might become necessary once enrollments exceed the postsecondary system capacity. Access and equity of opportunity are not seen to be greatly increased by this model, other than in increasing access and equity in meeting the needs for baccalaureate programs in the particular region in which the university is located. All respondents agree that if a fifth university was created, it should be located outside the cities which presently contain universities. However, none of the public colleges is interested in becoming the fifth university, and therefore establishment of a new institution would be required. Establishment of credibility of degrees programs in both the public and higher education views would require a substantial period of time.

Table 7
Application of the Rating Scale to Model 1.5

Total Rating Score: 5

Rating Factor	**Score**	**Comments**
Overall Enrollment Capacity	2	
Equity of Access	2	increases access in one additional region.
Equity of Opportunity	1	
Meeting Regional Needs	1	meets regional needs in the area located.
Funding Requirements	-1	Seen by all respondents as very high, and therefore not supportable No college wishes to convert to university status.
Program Quality	1	Remains with university - dependent on ability to attract faculty, development facilities and resources; initiate and maintain research
Degree Credibility	1	Will take time to establish, dependent on program quality factors.
Acceptability to Public	0	Highly acceptable to the designated community. Major concerns with expenditure required will be evident.
Acceptability to Universities	0	Not seen as necessary, concern with effect on overall system funding, and on competition for faculty.
Acceptability to Colleges	0	More acceptable if one of several solutions. Not seen as necessary if the immediate future.

Table 7 Continued

Acceptability to Government	-1	unacceptable funding requirements, need not established, does not respond to needs of all regions.
Potential Implementation Problems	-1	

Models to Facilitate Joint University-College Program Provision

2.1 University Colleges

The University College model allows for establishment of four year degree programs in colleges, with degree granting authority remaining with an affiliating university. The program instruction most commonly is given by college instructors, but standards for faculty qualifications, program content, and student evaluation are the responsibility of the degree granting university. Diploma and career preparation programs are continued by the college under its own authority. Credibility of the degree awarded is the credibility ascribed to the awarding university, and quality is seen as being maintained. Issues in the autonomy of institutions in this model potentially can create conflict within the system, and a decrease in provision of appropriate programs. There is a division of opinion among the institutional respondents as to the appropriateness of this model in Alberta; part of the divisiveness may be due to a lack of clarity in the definition and structure of this model.

Table 8
Application of Rating Scale to Model 2.1

Total Rating Score: 15

Rating Factor	Score	Comments
Overall Enrollment Capacity	2	Potential increase of 5000 places .
Equity of Access	2	

Table 8 Continued

Equity of Opportunity	2	Greatly increased. May be negatively affected if the number of programs offered is limited.
Meeting Regional Needs	3	
Funding Requirements	2	Increased funding required to upgrade and expand facilities, increase numbers of qualified staff, and to support increased participation in research by faculty.
Program Quality	0	Remains responsibility of universities. Perceptions of quality among university faculty, and among college faculty could be problematic dependent on the perceived equivalence of programs, and the responsiveness to college input.
Degree Credibility	1	To public and institutions external to the province, degree credibility should be maintained. Perceptions of quality within the Alberta universities will affect perceptions of degree credibility.
Acceptability to Public	2	Acceptable if all colleges involved in university-transfer programs, and all universities are involved. A variety of degree programs must be offered. Loss of acceptability will occur if the U of A and U of C are not involved, or if program offerings are limited.
Acceptability to Universities	0	Acceptable in maintenance of university control. Demands on university resources and personnel time, and concerns with maintenance of quality could affect acceptability.
Acceptability to Colleges	0	Acceptable to some; not to others. Autonomy of colleges may be threatened; faculty and resource allocation conflicts may escalate in the colleges.

Table 8 Continued

Acceptability to Government	0	Potentially acceptable due to limited funding requirements, ability of model to meet regional needs, and maintenance of degree credibility. The research involvement of colleges, the corresponding funding requirements, and effect on community college mandates and roles negatively affect acceptability.
Potential Implementation Problems	1	Conflict in autonomy of institutions; allocation of resources; willingness of the universities to participate; internal conflicts in both universities and colleges as to acceptability and need may result. Creation of such colleges in other areas have resulted in conversion of these colleges to universities.

2.2 Capstone and Two Plus Two Programs

Capstone programs were originally designed to provide two years of university study following completion of a technical or career-based diploma program, resulting in a baccalaureate degree. The two years of university study are the complete responsibility of the university offering the program; the technical or career-based program the complete responsibility of the community college. In Alberta, the Capstone program developed by Athabasca University more closely resembles a two plus two program, that is, an articulated model of program design, with the first two years designated as university-transfer programming in the college, with the degree awarding university designating some requirements for course design and structure during this period. The faculty qualifications and student evaluation standards are set by the college for the first two years; however the university will have some influence on these as well.

Table 9
Application of Rating Scale to Model 2.2

Total Rating Score: 27

Rating Factor	Score	Comments
Overall Enrollment Capacity	2	Increased by 5000 places.
Equity of Access	2	Greatly increased
Equity of Opportunity	2	Greatly increased provided variety of programs is offered by all four provincial universities.
Meeting Regional Needs	2	Majority of needs met.
Funding Requirements	3	Additional funding needed to expand library and physical resources of colleges. Additional funding may be required to recruit faculty, or support faculty travel. Funding for research not required.
Program Quality	2	Maintained at current level - public perceptions may increase due to smaller class sizes. Quality control, and determination of ability to offer the third and fourth year of programs clearly the responsibility of university faculty.
Degree Credibility	3	Maintained with general public and higher education community.
Acceptability to Public	3	
Acceptability to Universities	2	Maintains university control and standards in senior undergraduate years. Issues in resource allocation, and availability of appropriate facilities and resources in the colleges may lessen acceptability.
Acceptability to Colleges	2	Acceptable to those colleges interested in complete degree programs. Conflict may result due to lack of college input in final years of program, college inability to obtain programs, or lack of participation by the traditional universities.

Table 9 Continued

Acceptability to Government	2	Use of existing resources, meeting of regional needs, and maintenance of degree quality and credibility enhance acceptability. Resource capacity of universities, and willingness to participate is of concern.
Potential Implementation Problems	2	Participation problems with universities, or faculties within those universities; may foster lobbying by colleges to be granted authority to award degrees, particularly if large numbers of college faculty are seconded by the universities to teach in the senior years of the programs.

2.3 Cooperative and Brokered Programs

These programs involve university utilization of the facilities of a community college to offer a residency program leading to a baccalaureate degree. The university retains final control of the program content, design, standards, and instruction throughout the entire program. Negotiation between the college and university determines program design and course content; college instructors, approved by the university, provide the majority of program instruction The advantages of this model are seen as maintenance of quality programs; maintenance of degree credibility; limited economic impact on the postsecondary system or individual institutions through the use of existing facilities and personnel; and meeting the requirements for increased regional access in a cost-effective way. The major disadvantages seen are the willingness of all universities to participate in this type of negotiated program; the capacity of the universities to extend their resources in this manner; the length of time required in the current negotiation and approval process for such programs within the traditional universities; and the capability of current college resources to support such programs. The majority of the study respondents support this model; the University of Alberta is unsure that it can be implemented other than in specific programs.

Table 10

Application of Rating Scale to Model 2.3

Total Rating Score: 23

Rating Factor	**Score**	**Comments**
Overall Enrollment Capacity	1	Sufficient to meet current needs; could meet projected needs with additional funding.
Equity of Access	2	
Equity of Opportunity	2	Requires that a variety of degree programs offered by all four universities be available.
Meeting Regional Needs	3	
Funding Requirements	3	Funding required to enhance and expand existing resources. Seen by all respondents as requiring less funding than that required in most other models.
Program Quality	2	Control remains with universities. Inadequate resources may affect quality. University personnel may question quality due to lack of research by college faculty.
Degree Credibility	3	
Acceptability to Public	2	Highly acceptable. Could be adversely affected if process of negotiation for programs is lengthy, or unsuccessful in obtaining programs seen as necessary by the community.
Acceptability to Universities	1	Three universities support the model, one supports implementation of the model only for specific programs. Level of control in determining participation is a key issue.
Acceptability to Colleges	2	Majority of college respondents see model as the most desirable and feasible method. Less acceptable if difficulties in negotiating particular programs, or in having some input into programs occurs. Two respondents believe model would disrupt college mandates and cause internal conflict.

Table 10 Continued

Acceptability to Government	2	As for the Capstone model. Concerns that some faculties at the U of A and U of C may be resistant.
Potential Implementation Problems	0	A negotiation process and establishment of guidelines and standards for program provision is necessary, and may be difficult to establish. Projected shortage of qualified faculty may directly impact on implementation. Addition of research activities to college faculty roles will create conflict, and make model economically less feasible.

2.4 Degree Granting Consortia

Consortia are an arrangement through which two or more institutions cooperate to provide programs. For provision of degree programs, these arrangements could involve cooperative arrangements between the existing universities to provide regional degree programs through the pooling of resources; or between the existing universities and colleges in a capstone or brokered program arrangement. Consortia reduce duplication and increase efficiency by pooling resources, increase access to degree programs, and increase credibility and acceptance of particular programs by the public. Issues in institutional autonomy, the potential for unequal member institution commitment, and differing institutional philosophies and interest may create conflict in consortia, and reduce program provision. The "Communiversity" model proposed by Gleazer (1980) would place the responsibility for negotiation and arrangement of specific degree programs with the community college. This form of consortial arrangement is seen to increase the likelihood of meeting regional needs, but cooperation in this manner may be difficult to achieve. Other than the expressed interest of the regional colleges in negotiating with the universities to obtain degree programs seen as needed in their communities, no study respondent identified this model as an alternative way to provide degree programs in Alberta.

Table 11

Application of Rating Scale to Model 2.4

Total Rating Score: 15

Rating Factor	Score	Comments
Overall Enrollment Capacity	2	
Equity of Access	3	Extends services to all communities.
Equity of Opportunity	1	Dependent on member institution commitment, and extent to which services are provided.
Meeting Regional Needs	2	Regional needs substantially met.
Funding Requirements	0	Required to enhance existing resources, and provide travel funding for participating faculty. Dependent on extensiveness of implementation of the model, and format of program delivery.
Program Quality	2	Universities retain control of standards.
Degree Credibility	3	
Acceptability to Public	2	Acceptance may be reduced if programs are offered primarily through distance education delivery.
Acceptability to Universities	0	Stretches university resources; issues with autonomy and authority of universities in degree programming are likely to arise. Lack of suitable facilities and equipment in many communities will create difficulties in program provision.
Acceptability to Colleges	0	Autonomy and authority issues; impact on college operations; and concerns regarding control of resource allocation will lessen acceptability.
Acceptability to Government	0	May be acceptable due to use of existing resources and facilities. Concerns may exist about the danger of consortia focusing on degree programs, and resultant loss of other programs; and with the extensiveness of funding which may be required.

Table 11 Continued

Potential Implementation Problems	0	Clear delineation of negotiation procedures, institutional responsibilities, resource requirements for program provision, funding, personnel allocation, program delivery systems, and coordination mechanisms required. Agreement to this will be difficult to obtain.

Models to Allow Public Colleges to Grant Selected Baccalaureate Degrees

3.1 Upgrade Selected Public Colleges to University Status

This model is historically the most common method of increasing the availability of degree education. The system of restricting degree granting to university institutions is maintained. Generally issues with maintenance of quality do not arise with such conversions, based on the adoption of university philosophies by institutional personnel. Credibility of the degrees awarded may require development over time, and is dependent on the success of graduates of the programs and the academic prestige accrued by the faculty in the new institution. The major disadvantage in this approach is the required discontinuance of, and therefore loss of access to the diploma and academic preparation programs offered by the public colleges. In most of the regional areas, separate institutions for degree studies and diploma studies are not demographically or economically feasible. Conversion to university status of these community colleges which presently offer a substantial number of two year university-transfer programs is identified as a possibility by most of the study respondents. All respondents believe such conversion is unnecessary, costly, and likely to create a need to build a new community college in the region.

The specific effects of this model are similar to those of creating a fifth university.

Table 12

Application of Rating Scale to Model 3.1

Total Rating Score: -4

Rating Factor	Score	Comments
Overall Enrollment Capacity	3	
Equity of Access	-1	Increases access in only one region.
Equity of Opportunity	-1	Loss of current community college programs and services.
Meeting Regional Needs	-1	Degree program needs met in only one region; loss of non-degree programs in that region.
Funding Requirements	-1	Experience with U of L dictates large expenditure will be required.
Program Quality	0	Dependent on resource availability, and retention of common standards in baccalaureate programs
Degree Credibility	1	Will require time to develop credibility.
Acceptability to Public	0	May or may not be acceptable. Dependent on view of public of need for degree and non-degree education; cost factors.
Acceptability to Universities	-1	Respondents believe a new institution is not required. Concerns exist with ability of converted college to maintain quality; and with possible increased competition for funding and faculty.
Acceptability to Colleges	-1	Not supported by any college respondent.
Acceptability to Government	-1	Not supported by government respondents.
Potential Implementation Problems	-1	Implementation will escalate requests by other colleges for similar conversion. High potential for creation of "second class" institution.

3.2 Expand the Public College Mandate to Include Selected Degree Granting Authority

Expansion of existing regional institutions to offer both undergraduate degree and diploma education, and the corresponding extension of selected degree granting authority to these institutions, is a recent trend in West Germany and Europe, Britain, and Australia. Proposals promoting this model were developed in Ontario in 1971, and are currently under discussion in that province. Difficulties commonly encountered in creation and implementation of degree programs in these regional institutions include: initial problems in developing public and employer acceptance of the quality and credibility of the degree awarded; the non-acceptance of these degree programs by the traditional universities, creating inter-institutional transfer and graduate study program access problems; confusion as to the specific mandates and roles of the different institutions in undergraduate education and research activities; and a tendency for the regional institutions to systematically adopt the philosophies and governance modes of the traditional academic universities. This results in loss of public access to non-university programs in the region and increasingly restricted access to the undergraduate degree programs offered by the colleges.

The implementation of this model has resulted in increased accessibility to undergraduate education, and a significant increase in the number of individuals with completed baccalaureate degrees. The provision of such education by the regional institutions is seen by many governments as a cost-effective way of meeting regional and national needs. The credibility of the degrees awarded is steadily increasing as the program graduates successfully enter the work force, and successfully complete graduate study. Most countries have subsequently developed clear policy directives in order to clarify the roles and mandates of the various institutions , and facilitate granting of academic credit to overcome the transfer and access to graduate study issues.

All university respondents, and two of the college respondents see this model as undesirable; three of the college respondents see this model as potentially desirable; the government respondents were essentially neutral as to the desirability of this model.

Table 13
Application of Rating Scale to Model 3.2

Total Rating Score: 16

Rating Factor	**Score**	**Comments**
Overall Enrollment Capacity	3	Increased in both regional and aggregate; could be incrementally expanded or contracted based on level of demand.
Equity of Access	2	Increased particularly for individuals outside the major urban areas.
Equity of Opportunity	2	Generally increased. May be restricted if variety of programs offered is limited, or if public perceptions are that programs are of lower quality.
Meeting Regional Needs	3	Reflects identified needs.
Funding Requirements	2	Restricted to enhancement of existing facilities provided that involvement in research is not added to college faculty roles.
Program Quality	0	Disagreement among study respondents. Affected by availability of faculty, research involvement, equipment and facility suitability.
Degree Credibility	0	Will be difficult to establish particularly with the higher education community.
Acceptability to Public	3	Meets public expectations and beliefs.
Acceptability to Universities	-1	Not acceptable to any university respondent.
Acceptability to Colleges	2	Not acceptable to two of the college respondents. Seen by others as receiving support by their communities, and as a very economical way to increase degree program provision.

Table 13 Continued

Acceptability to Government	0	High level of concern with impact on community college mandates and program provision; potential requirement for research funding; and projected shortage of PhD qualified faculty.
Potential Implementation Problems	0	University acceptance not likely, this may affect public perceptions of credibility of programs offered. Programs may become "terminal" degrees. Funding requirements difficult to establish.

Models to Restructure the Postsecondary System

4.1 Develop a System Similar to the California Masterplan for Higher Education

In the California system, one university, the University of California is designated as holding primary responsibility for education at the doctoral level, for the provision of professional education in Law, Medicine, Dentistry, and Veterinary Medicine, and for organized research. This University also offers baccalaureate and masters education, but at a very select level, geared towards students who achieve qualifying academic marks in the top ten percent of the state examinations. State universities hold the responsibility for baccalaureate education, selecting students from the top thirty percent successfully completing state examinations, and for master's level education. These institutions can only offer doctoral programs under joint degree agreements with the University of California or the private universities. Private universities may offer any level of university degree education. Community colleges provide two year university-transfer programs to all other students who achieve a high school diploma. Transfer to state universities after successful completion of these university-transfer programs is guaranteed by the state government. Private universities also accept transfer students from these institutions. The advantages of this system are the guarantee of access throughout the State, the maintenance and perhaps improvement of quality within each institution, and the improvement in the ability of institutions to effectively meet student needs and ensure quality outcomes in the education provided.

It is difficult to determine how this system could be adapted in Alberta. Certainly, the University of Alberta could be designated as the senior institution, but the University of Calgary, and the City of Calgary residents can be predicted to object strongly to this. The University of Alberta and the University of Calgary could be designated as the University of the North and the University of the South, with the University of Lethbridge becoming the "state university" for the South, and Athabasca University becoming the "state university" for the North. Based on the data collected in this study, neither the University of Lethbridge or Athabasca University would have serious objections to assumption of this type of mandate. Implementation of this model would imply that Athabasca University would provide some on-campus, residential programs. Difficulties do arise in determining which university serves the community of Red Deer. Implementation could increase the duplication of programs and services to a far greater extent than exists presently.

A second way in which the model could be adapted is to designate selected community colleges, that is, those presently offering a full range of two year university-transfer programs, as "state universities." The problems discussed under creation of a fifth university, or conversion of colleges to degree granting status would be very evident in this adaptation, and duplication of programs and resources would become a major issue.

As defined in the California system, this model does not address the basic issue underlying the pressure for increased access to baccalaureate programs in Alberta, that is, increasing the provision of complete degree programs in the regional areas outside the major cities. If the State University designation included responsibility for regional provision of degree completion programs, through capstone, brokered, or off-campus types of programs, then this need could conceivably be met. Adapting the model in this manner would allow the community colleges to maintain their present mandates.

For the purpose of this discussion, the most viable adaptation of the California Masterplan model would appear to be designation of the University of Alberta as the University of the North, and the University of Calgary as the University of the South, with their roles and responsibilities reflecting those outlined for the University of California. The University of Lethbridge would become the State University of the South; Athabasca University the State University of the North. As well as adopting the mandate of the State universities of California, these institutions would be designated responsibility for provision of complete degree programs off-site within their defined regional areas. The community colleges would continue under their current mandate, and facilitate the provision of complete degree programs in their institutions by the State Universities. The community of Red Deer is arbitrarily assigned to the South region; all communities north of that city are assigned to the North region.

Table 14
Application of Rating Scale to Model 4.1

Total Rating Score: 1

Rating Factor	**Score**	**Comments**
Overall Enrollment Capacity	0	Aggregate capacity remains the same; potential for incremental increases. Structure of enrollments would change in the institutions. U of A and U of C would be reduced in size, U of L and AU would greatly increase in size.
Equity of Access	-1	Increased outside Edmonton and Calgary; greatly decreased within these cities.

Table 14 Continued

Equity of Opportunity	-1	as for access. Selection of students for particular institutions by marks achieved has high potential to be viewed as greatly increasing inequity.
Meeting Regional Needs	1	Regional needs more satisfactorily met than in current system, urban needs may not be seen a being met at a satisfactory level.
Funding Requirements	1	Higher level of funding required primarily to support "State" universities, and support advanced research and graduate programs at the senior universities. May be balanced by budget reallocations between institutions.
Program Quality	3	Could be increased by focus of institutions on particular programs. Senior university programs may be perceived as being of higher quality than other programs, due to elite nature of students.
Degree Credibility	0	Public and higher education community may perceive "best" degrees as those awarded by the senior institutions.
Acceptability to Public	-1	Increased availability of programs, role differentiation of universities, and cost-effective use of resources and facilities would be acceptable. Hierarchy of institutions, reduction of local access in major cities, and system of student selection not generally acceptable.
Acceptability to Universities	0	High potential to create conflict between universities, and create perceptions of "first class," "second class" institutions, and degree programs. Would likely be very acceptable to the U of A and U of C.
Acceptability to Colleges	0	Acceptable in increasing regional provision of degree programs. Unacceptable in limitation of programs to those of a particular university, and in potential creation of differing status of degrees awarded.

Table 14 Continued

Acceptability to Government	0	Clarification of institutional mandates, ability to meet regional needs, budget reallocation possibilities, and increase in research activities in the senior institutions contribute to acceptability. Reduced access to undergraduate programs in the major cities will create political difficulties, as will the potential for institutional conflict.
Potential Implementation Problems	-1	Difficulties in reallocating budgets, redesigning system mandates, perceptions of institutional hierarchies and differing status and credibility of degrees overwhelm advantages.

4.2 Develop an External Accreditation System for Determining Degree Granting Authority

This model has been recently adopted by the Government of the United Kingdom. The Council of National Academic Awards hold the authority to grant baccalaureate degrees on completion of any program offered in postsecondary institutions in Britain. This council sets the standards for such accreditation, and determines course validation of each program offered in non-university institutions. Universities and polytechnics continue to offer their own degrees, but most are in the process of receiving "validation" by the Council of National Academic Awards.

In Alberta, the Private Colleges Accreditation Board was established to recommend approval of degree granting status for the private colleges, and is perceived as functioning very effectively. One college respondent believes that an extension of the mandate of this Accreditation Board would be an effective, equitable way to extend degree granting authority in the province. The Alberta Council on Admissions and Transfer is an independent body reporting to the Minister of Advanced Education, which develops policies, guidelines, and procedures to facilitate transfer arrangements among postsecondary institutions. Several study respondents felt the mandate of this council could be extended to include assessment and recommendation of complete degree programs proposed for provision by institutions other than the universities. Two of the university respondents stated that establishment of an accreditation board to ensure quality in baccalaureate programs offered outside the universities would enhance the desirability and feasibility of extending degree programs. This would apply to cooperative university-college programs leading to a degree, and/or to college degree programs. The belief of these respondents is that establishment of such a mechanism would increase the credibility and acceptability of these degrees in the university community. Increased conflict over institutional autonomy and independence is identified as a possible negative result of creation of such a mechanism. One of the university respondents is very opposed to establishment of any form of accreditation board; the government respondents state creation of such a board would create two different standards for determination of degree programs.

Table 15

Application of Rating Scale to Model 4.2

Total Rating Score: 14

Rating Factor	**Score**	**Comments**
Overall Enrollment Capacity	2	Meets projected needs.
Equity of Access	1	Improved if program approval occurs quickly, and is equitable throughout regions.
Equity of Opportunity	1	as for access
Meeting Regional Needs	3	
Funding Requirements	1	Funding required for board establishment and on-going management, and for travel support for board members. Other funding requirements reflect those of other models to extend degree granting authority.
Program Quality	1	Dependent on standards set, and acceptance of those standards by institutions.

Table 15 Continued

Degree Credibility	1	Dependent on standards and evaluation process required to obtain accreditation.
Acceptability to Public	2	Dependent on perceptions of cost, equity of decisions, credibility of degrees,and extent of provision of regional degree programs.
Acceptability to Universities	2	Dependent on adequate representation on board by universities, and establishment of accreditation standards reflective of university standards and evaluation processes.. One respondent believes this model is unnecessary ,unacceptable, and impossible to implement..
Acceptability to Colleges	1	Distribution of representatives, level of university control, length of accreditation process, fairness and equity in decisions made influence acceptability. Colleges would object to process not being equally applicable to universities. Seen as one possible way to extend degree program provision quickly.
Acceptability to Government	1	Need for such a board is seen as dependent on the solution adopted. Concerns with creation of separate system of approval for colleges, and potential for creating perceptions of differing institutional status and prestige.
Potential Implementation Problems	-1	Determination of appropriate representation, standards to be applied, and evaluation process will be difficult and require an extensive period of time.May not be satisfactory to any of the institutions or the general public.

4.3 Develop a System Similar to the Australian System of Higher Education

The Australian system for higher education is similar to the California System, but has some distinct differences. Universities in Australia hold responsibility for provision of baccalaureate, masters, and doctoral programs, and for research. The Colleges of

Advanced Education hold responsibility for career-based education at the diploma, baccalaureate, and selected master's levels. No doctoral programs may be offered by these institutions. Faculty in these colleges may participate in a limited amount of applied research. The Technical and Further Education Colleges provide skilled trade, technological, and academic preparation programs at the diploma level only, and are not authorized to conduct research. All institutions award their own degrees and/or diplomas.

In Alberta, conversion of the public colleges to a College of Advanced Education model, would be supported by one of the college respondents as a logical extension of the present career-based programs offered by the colleges. The development of nursing degree programs in this model would be supported by all college respondents. Unless selected arts and science degrees, and perhaps particularly education degrees were included in this expansion of mandate, the model would be unacceptable to the majority of the colleges. Although not addressed by the universities, this model would likely be unacceptable due to the perceived "division' in types of degrees, and the likelihood that such degrees would lack any general education component. This model was also not addressed by the government respondents. The government response can be assumed as perceiving the model as partly acceptable due to the extension, rather than change in, the present community college mandates; but unacceptable if a two-tiered system of degrees is established.

Table 16

Application of Rating Scale to Model 4.3

Total Rating Score: 6

Rating Factor	**Score**	**Comments**
Overall Enrollment Capacity	1	Limited effect on increasing enrollments.
Equity of Access	1	Dependent on programs offered by the colleges.

Table 16 Continued

Equity of Opportunity	1	As for access.
Meeting Regional Needs	1	Met to a limited extent.
Funding Requirements	3	Limited to enhancing and expanding existing resources.
Program Quality	0	Standards would most likely reflect standards, competencies, and values of the particular career track which could increase perceptions of quality by employers. Differences from traditional university designs could result in perceptions of decreased quality, particularly in the higher education community.
Degree Credibility	0	Increased with employers and community if program seen as responsive to community needs, and degree promotes enhancement of career opportunities.Universities may not accept the degree as a credible qualification.
Acceptability to Public	1	Dependent on type of program provided, and perceptions of degree credibility.
Acceptability to Universities	-1	Unlikely to be acceptable in any way.
Acceptability to Colleges	0	Acceptable to only one college respondent.
Acceptability to Government	0	Partly acceptable due to extension of, rather than change in, current community college mandates, and limited funding requirements. Unacceptable if two-tiered system of degrees established, or if regional needs not met.
Potential Implementation Problems	-1	Determination of which programs to offer, and where will be a major issue. Potential for programs to adopt university models without adequate resource and facility support. Creation of terminal programs highly likely.

4.4 Redefine the Roles and Mandates of the Universities

This model is extrapolated from the discussion with the President of the University of Lethbridge. The key requirement of the model is to create institutions which are distinctly different from each other. A system plan which identifies which degree programs will be offered by which institutions, and at what levels (undergraduate or graduate) would be developed. This plan would allow for some duplication of programs, if the need for such programs exceeds the capability of one institution to provide adequate enrollment spaces. Any degree program offered by more than one institution however would be required to have distinctive differences reflecting the regional needs, or particular philosophies of the degree granting institution. Therefore, individuals in all regions of the province would be required to access programs where they were offered. Each university would be designated as having responsibility for a particular type of research involvement, that is, basic research, contract research, or applied research. All universities would have adequate library resources, but one university would be the location of a major research library. All postsecondary institutions would have access to this library's resource data base, and have interlibrary loan privileges. University-transfer programs would be maintained in the community colleges and articulated with specific degree programs in specific universities. A system which guarantees transfer between community college, baccalaureate, and postgraduate studies would be created. In some ways, this model reflects the California masterplan, and the Australian system of higher education.

The advantages of this model are the potential to increase the quality of all degree programs, reduce the duplication of programs , more effectively use resources, enhance the ability of the universities to reach excellence in both program provision and research, and provide equivalent access to all degree programs throughout the province. The major disadvantages of this model are that it does not address the regional needs for local education; requires a major adjustment in public attitudes towards reasonable access to university programs, may create considerable institutional conflict regarding assigned mandates and roles, and may inhibit adaptability of the higher education system to changing needs.

Table 17
Application of Rating Scale to Model 4.4

Total Rating Score: 10

Rating Factor	Score	Comments
Overall Enrollment Capacity	0	Unlikely to be significantly changed.
Equity of Access	3	
Equity of Opportunity	1	May be perceived as increasing inequity by dictating relocation of individuals wishing to access particular degree programs. Duplicated programs with distinctive differences may not be seen as equivalent.
Meeting Regional Needs	-1	not addressed by this model.
Funding Requirements	3	Equivalent to present system. Allocation of funding to institutions may change; potential for inter-institutional conflict is high.
Program Quality	3	Specialization of institutions may result in increased quality.
Degree Credibility	3	
Acceptability to Public	-1	Requirement to access particular programs at particular universities will be unacceptable. Limitation of research in some institutions will be unacceptable to community developers.
Acceptability to Universities	1	Acceptable if assigned mandates reflect university philosophies and beliefs, and universities are directly involved in design and approval of the system. Reduced acceptability if community objects to redesign.

Table 17 Continued

Acceptability to Colleges	-1	Lack of response to community needs, and requirement that community colleges develop programs to articulate with all four universities make this option unacceptable.
Acceptability to Government	-1	Political feasibility of implementing this model is very low.
Potential Implementation Problems	0	Inter-institutional conflict in determining roles and mandates, funding allocations, and research responsibilities is highly likely. Hierarchy of institutions likely to be established Defining the role of Athabasca University may be a major point of contention.

4.5 Restructure both College and University Roles in Provision of Undergraduate Programs

This model is an extrapolation and expansion of the plans and perspectives of the University of Alberta, as discussed in *The Next Decade and Beyond* (1987). In this model, the community colleges would assume responsibility for provision of the first two years of all undergraduate degree programs. Community colleges which do not presently offer this level of university-transfer programming would need to be expanded. All community colleges would need to expand enrollment capacity. The universities would assume responsibility for third and fourth year undergraduate programs; provision of off-campus programs at the community colleges would be a distinct part of this mandate. Universities could design such off-campus program provision according to any of the previously discussed "university control" models, for example, capstone, cooperative, brokered, or two plus two models. The existing approval process for transfer of credit between colleges and universities would be maintained.

The advantages of this model are its recognition and expanded use of the current university-transfer programs in the colleges, which are seen by all of the study respondents as providing high quality education. The enrollment pressures on the universities due to increased numbers of beginning students, and increased numbers of students requesting transfer into third and fourth year, would be reduced. The physical facilities and resources, and particularly the human resources available at the universities, are seen by all university respondents, and some of the college respondents, as necessary to maintenance of quality in the third and fourth year of undergraduate programs. College university-transfer programs are seen by many respondents to be more effective in meeting student needs while maintaining the established standards, than are many first and second year programs at the universities.

The disadvantages of this model are: the potential for increased disruption of community college mandates and roles, as college operations are increasingly focused on provision of university-transfer education; the availability of only one community college in each of the major cities which may not be able to accommodate the resultant enrollment demand in those cities; and, a potential for the colleges to be unable to obtain sufficient personnel, or maintain class sizes and student services at a level which allows for continuing maintenance of quality, and meeting of student needs. The capability or willingness of the universities to provide off-campus programs and the likelihood that conflict will develop over funding for each type of institution may affect the success of this model. Establishment of a system for determining which university will provide programs at which regional college(s) would be necessary.

Table 18

Application of Rating Scale to Model 4.5

Total Rating Score: 16

Rating Factor	**Score**	**Comments**
Overall Enrollment Capacity	0	Remains essentially the same.
Equity of Access	2	Increased in regional areas if implemented as planned, may be reduced in Edmonton and Calgary.
Equity of Opportunity	2	Should be increased. If perceived or real differences in quality or credibility of any college university-transfer program develop, inequities will develop. Ensurance of transfer student acceptance, and provision of off-campus degree completion programs necessary to equity.
Meeting Regional Needs	2	Majority of regional needs met.
Funding Requirements	1	Funding increases required to expand community college capacity. Some reallocation of funds from the universities could occur, but it is highly likely universities will insist current level of funding is needed to support expanded third and fourth year of degree programs.
Program Quality	3	Possibility of improvement through division of junior and senior aspects of programs.
Degree Credibility	3	
Acceptability to Public	2	High acceptance outside the major cities. Acceptance in these cities dependent on access to programs within the area.
Acceptability to Universities	2	Highly acceptable to large segments of faculty at the U of A. Acceptability unknown at other universities -- likely to create difficulties in determining mandate and extent of services at both the U of L and Athabasca.

Table 18 Continued

Acceptability to Colleges	0	Will create a great deal of dissension among community colleges; and may create problems in providing cost-effective programs. Degree of university control of university-transfer programs may be unacceptable.
Acceptability to Government	0	Utilization of existing resources, and potential for reallocation of funds are acceptable. Equity of access, particularly in the major cities may create political difficulties. Concerns with effect on mandate of the colleges, and need to guarantee transfer of students between programs.
Potential Implementation Problems	-1	Would cause serious disruptions in the system during initial implementation, and would require extensive time to plan and implement. Likely to foster continuing inter-institutional conflict..Funding demands may be very high.

DETERMINING THE MOST ACCEPTABLE MODELS

The initial application of the rating scale to the proposed models weighted each factor equally as to its effect on acceptability and feasibility of the model for implementation. To test the validity of the findings of this application, and the adaptability of this rating model in determining feasibility of model implementation, differential weightings (3:1) were assigned to three factors, and then to four factors which appeared to be of major importance to some or all of the stakeholders. The models were then analyzed utilizing only four of the factors to determine if this changed the rating of acceptability in any manner. A summary of the change in numerical factor ratings, and on the total rating score for each model created by application of the different weightings are presented in table form in Appendix C. The findings of each variation in application of the rating scale are discussed, and graphically depicted in this section.

For ease and clarity in discussion, the total rating scores of each model are expressed as a percentage of the possible maximum total score. The maximum total score is assumed to represent one hundred percent acceptability to the identified stakeholders.

Findings When Each Factor is Equally Weighted

The findings of this application of the rating scale are graphically depicted in Figure 5. When each factor is equally weighted, the Capstone/two plus two model (Model 2.2)is the most acceptable with a rating of 75% acceptability, followed by cooperative/brokered programs (Model 2.3) at 61% acceptability. Several models are closely grouped around a total rating of 45% acceptability. In rank order these models are: Model 1.3, expand university provision of off-campus programs (47%); Model 2.1, create university colleges within existing community colleges, Model 3.2, extend degree granting authority to the community colleges, Model 4.5, restructure college/university responsibilities in baccalaureate programming (44%); Model 1.1, increase university and private college enrollment capacity, and Model 2.4, create degree granting consortia (42%). Three models fall within 30-39% acceptability: Model 4.2, develop an external accreditation system to extend degree granting capability (39%); Model 1.2, designate Athabasca University as the sole provider of regional programs (33%); Model 4.4, redefine university mandates (28%). The lowest ratings incorporate Model 4.3, developing a system similar to the Australian system of higher education (17%); Model 1.5, create a new university (14%); Model 1.4, increase provision of programs by out-of-province institutions (8%); and Model 4.1, developing a system similar to that in California (3%). A negative rating, indicating overall unacceptability, is assigned to Model 3.1, conversion of existing community colleges to universities.

Equal Weighting of Factors

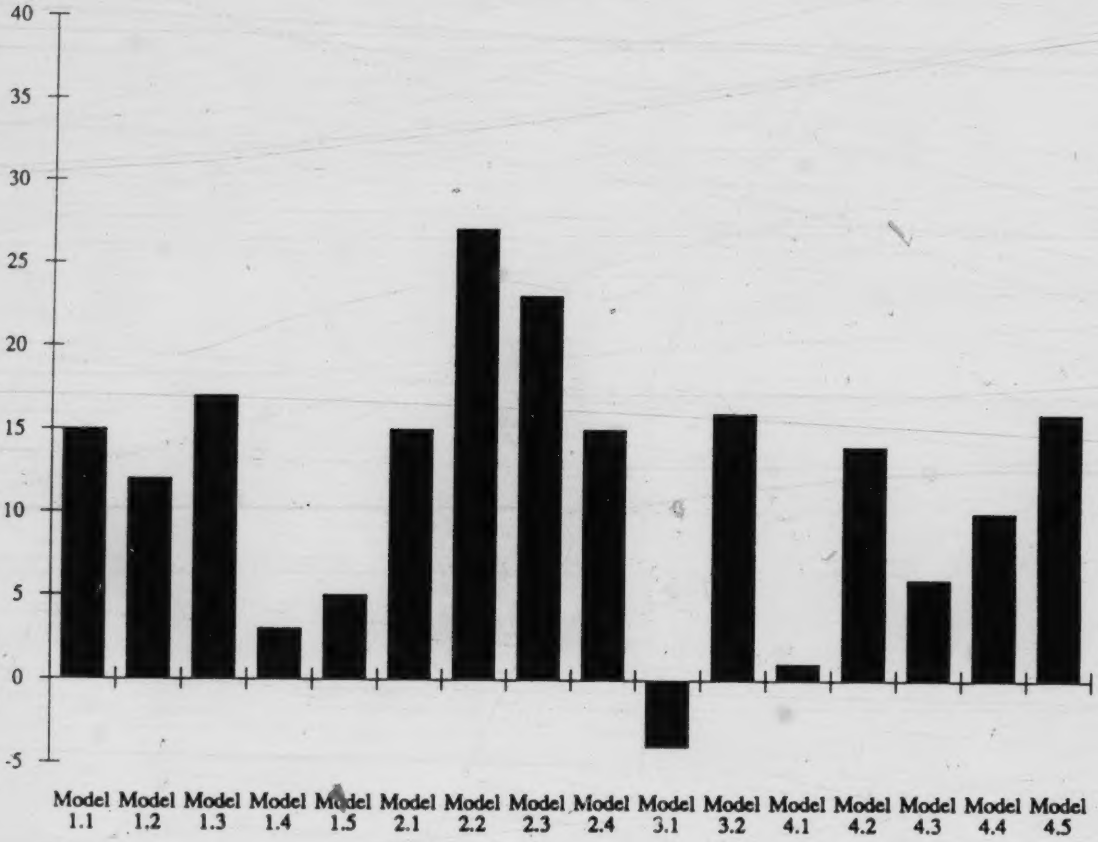


Figure 5

Increased Weighting Assigned to Three Factors

The findings of this application of the model are graphically depicted in Figure 6. When the following factors -- ability to meet regional needs, requirements for funding, and maintenance of degree credibility -- are weighted more heavily than other factors, the Capstone and cooperative/brokered models are more closely rated than when all factors are weighted equally. The Capstone model (2.2) is rated at 79.6% acceptability; the Cooperative model (2.3) at 75.9% acceptability.

The second group of models identified in the equally weighted factor discussion demonstrates some changes in ranking within the group of models and inclusion of some models previously ranked at a much lower level. The third highest rating is assigned to Model 4.5, restructuring college and university responsibilities in baccalaureate programming (51%); followed by, Model 1.1, increase university and private college enrollment capacity, Model 1.3, increase university provision of off-campus programs, and/or Model 2.1, create university colleges (50%); Model 4.2, an external accreditation system to extend degree granting capacity, and/or Model 3.2, extend degree granting capability to the public colleges (48%); and Model 2.4, create degree granting consortia (46%). Two models are rated at approximately 40% acceptability: Model 1.2, designate Athabasca University as the sole provider of regional degree programs, and Model 4.5, restructure the mandates and roles of the universities.

The lowest ratings incorporate Model 4.3, development of a system similar to the Australian higher education system (26%), Model 1.4, increase program provision by out-of-province institutions (20%), Model 1.5, create a new university (17%), and Model 4.1, develop a similar system to that in California (9%). The conversion of community colleges to university status (Model 3.1) remains negatively rated.

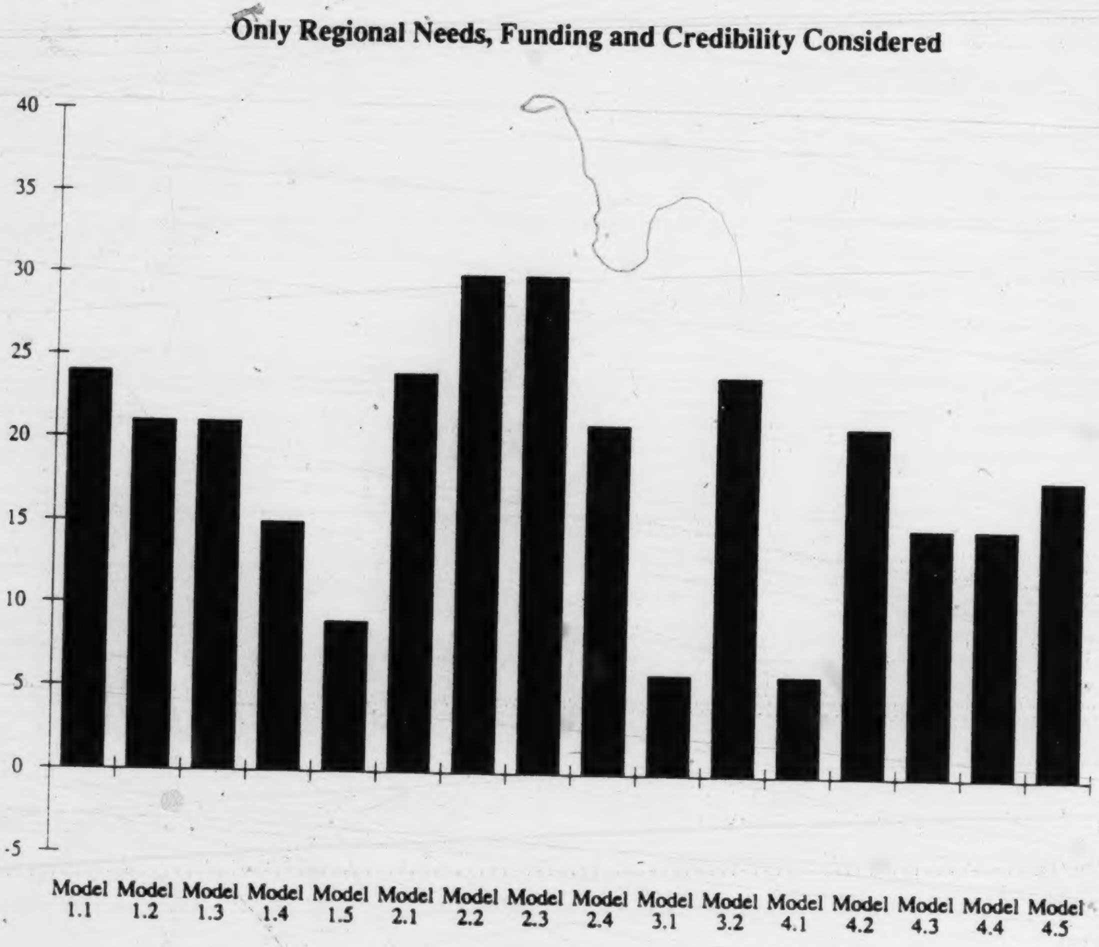

Only Regional Needs, Funding and Credibility Considered
40
35
30
25
20
15
10
5
0
-5
Model 1.1
Model 1.2
Model 1.3
Model 1.4
Model 1.5
Model 2.1
Model 2.2
Model 2.3
Model 2.4
Model 3.1
Model 3.2
Model 4.1
Model 4.2
Model 4.3
Model 4.4
Model 4.5

Figure 6

Increased Weighting Assigned to Four Factors

The findings of this application of the rating scale are graphically depicted in Figure 7. When the factors of effects on enrollment capacity, ability of the model to meet regional needs, requirements for funding, and acceptance by the universities are weighted more heavily than other factors, Capstone type programs (Model 2.2) remain as the highest rated model (71%). This acceptability rating is a lower rating than that which occurred in the first two applications of the rating system. Restructure of the college and university roles in provision of baccalaureate programs (Model 4.5) is rated essentially equal to that of Capstone programs (70%). Cooperative/brokered programs (Model 2.3) assume the third highest ranking, 62%.

Model 1.2, designating Athabasca University as the sole provider of regional degree programs rises to fourth place (52% acceptability) from the second lowest ranking group; all other rankings remain essentially the same with minor variations in ranked position. The order with this weighting is as follows: Model 1.1, expand university and private college enrollments (49%); Model 3.2, extend degree granting capability to the public colleges, and Model 4.2, create an external accreditation system for such such extension (48%); Model 2.1, create university colleges within the community colleges (46%); Model 1.3, increase off-campus program provision by the universities, and/or Model 2.4, create degree granting consortia (36%). Lowest ranked models remain as, Model 4.3, creating a system similar to Australia (27%); Model 4.4, restructure the mandates and roles of the universities (25%); Model 1.4, increase the provision of programs by out-of-province institutions (17%); Model 1.5, create a new university (11%); and Model 4.1, develop a system similar to that in California (8%). Conversion of community colleges to university status (Model 3.1) remains at a negative rating.

Enrollment Capacity, Regional Needs, Funding and Acceptance by University Weighted Higher

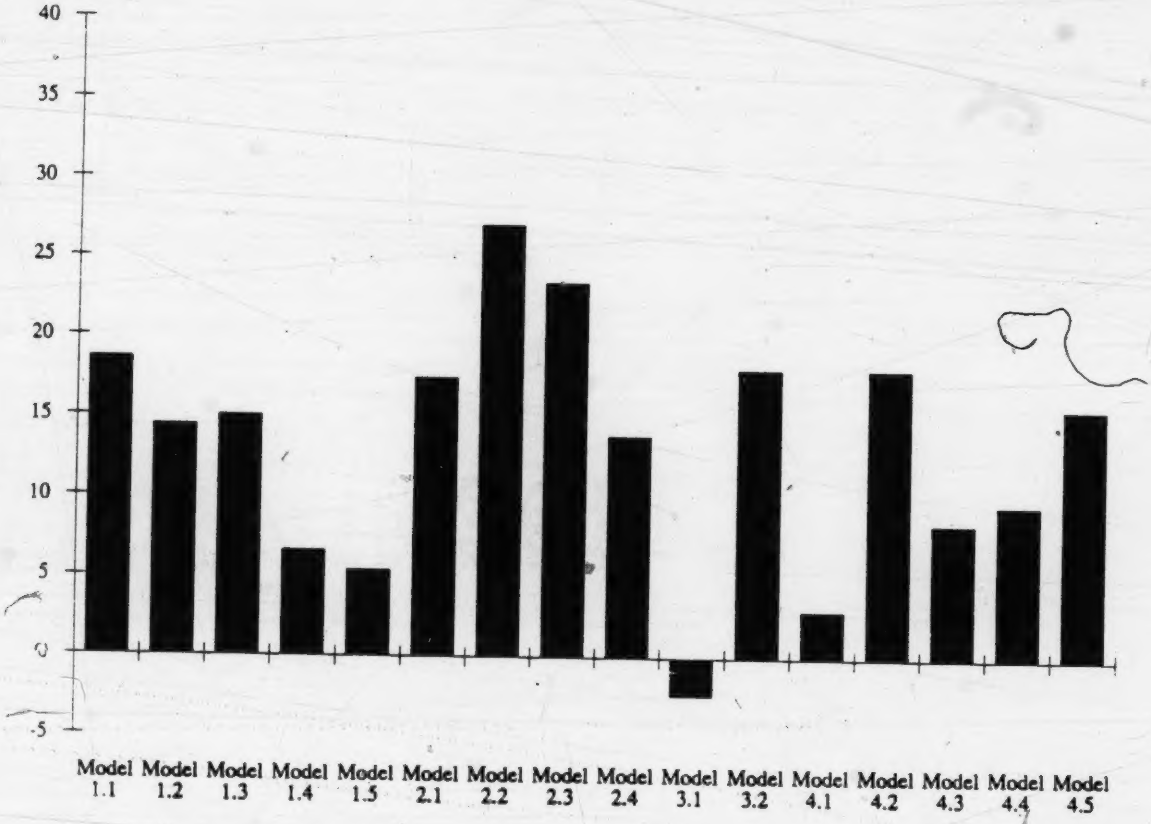


Figure 7

Utilize Only Three Factors in Rating Determination

Based on the findings of this study, three of the identified factors appear to to be more significant in determining the acceptability and feasibility of the models. The "regional needs" factor incorporates not only the desire for local provision of degree programs but also major aspects of the equity in access and opportunity factors, and to a certain degree, the effect on enrollment capacity. The funding requirements for model implementation are a major factor in the current economic climate in Alberta, and reflect aspects of the program quality, and "estimation of potential problems if implemented" factors. The degree credibility factor is a major concern of all stakeholders, and incorporates many aspects of the program quality, and acceptability to the public, universities, colleges and government factors. Therefore, only these three factors were utilized in rating the various models. The findings of this application are illustrated in Figure 8.

Capstone and cooperative/brokered program models (2.2 and 2.3) appear to be 100% acceptable when just these three factors are applied. The university college model (2.1) ranks second at 78%, and increasing university and private college enrollment capacity (Model 1.1), increasing provision of off-campus programs by the universities (Model 1.3), and restructuring college and university responsibilities in undergraduate programs (Model 4.5) rank third at 67%. Provision of regional degree program solely by Athabasca University (Model 1.2), development of degree granting consortia (Model 2.4), extending degree granting capability to the public colleges (Model 3.2), and redefining university mandates (Model 4.4) are all rate at 55% acceptability. Increasing provision of programs by out-of-province institutions (Model 1.4), and developing a system similar to that in Australia (Model 4.3) are rated at 44%; developing a system similar to California (Model 4.1), and establishing an external accreditation system (Model 4.2)are rated at 22%; creation of a new university (Model 1.5) is 11% acceptable. Converting colleges to universities (Model 3.1) remains negatively rated. Utilization of just these three factors does not provide as accurate or comprehensive an estimation of acceptability of a model as do the other applications; nor does it discriminate between models other than on a broad basis.

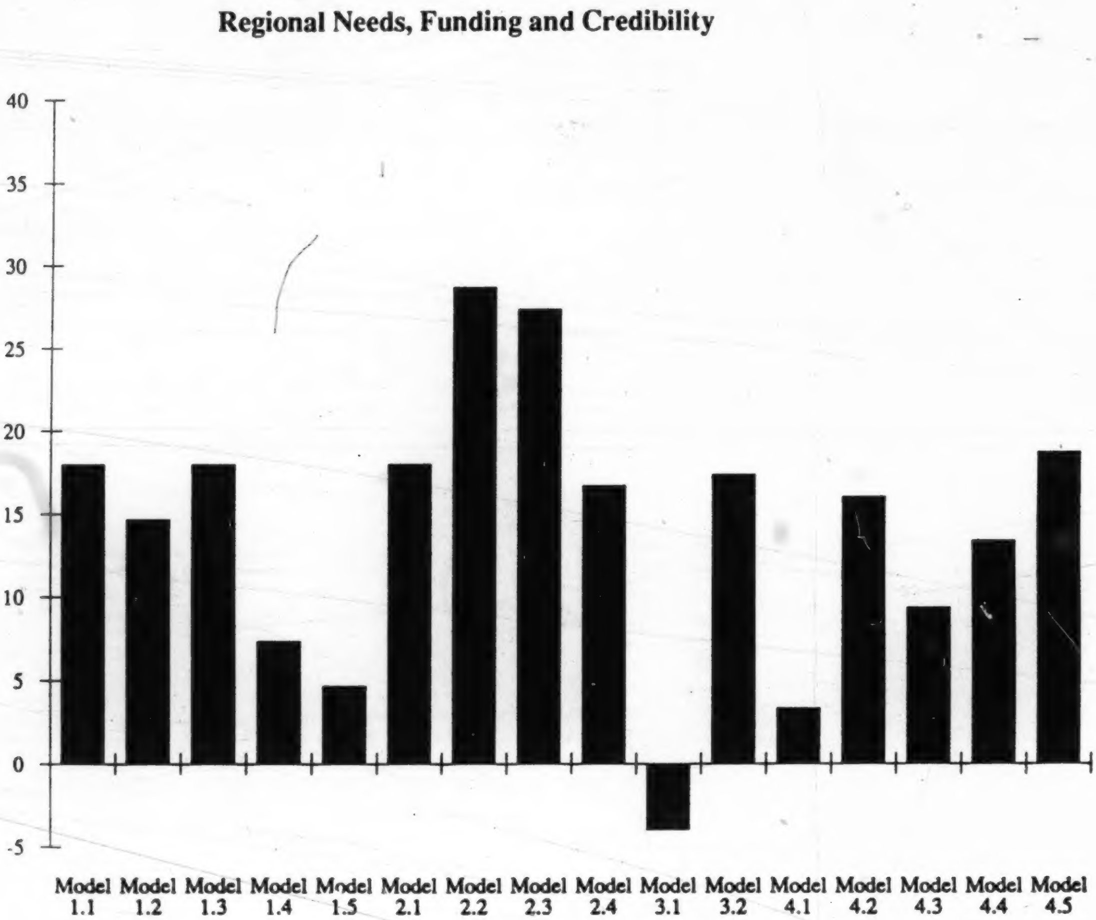

Regional Needs, Funding and Credibility

Figure 8

The Most Acceptable Model

The application of increased weights to the regional need, funding requirement, and degree credibility factors, seemed to provide the most valid indication of acceptability of models. No model is one hundred percent acceptable, but it is evident that the most acceptable model is one of joint college and university program provision. This model maintains college autonomy during the first two years of such programs, and maintains university control during the last two years. Acceptance and feasibility of this model is dependent on three major elements: involvement of all universities in such programs; university utilization of college physical resources and appropriately qualified college personnel; and provision of adequate funding to support program implementation. Acceptance and feasibility would be greatly increased in this model if funding were provided to create on-line access for all community colleges to the University of Alberta library, and to facilitate interlibrary loans to the colleges from university libraries.

The community college mandate and the teaching emphasis of college faculty roles would not essentially change from the current mandate and emphasis. Therefore, no additional funding or mandate changes to support research by college faculty would be required. Exposure to research methods and findings within baccalaureate programs would remain the responsibility of university faculty. The quality of the programs offered should be maintained or improved, and degree credibility maintained through the awarding of degrees by the universities. University mandates remain essentially unchanged, but some changes are required in the systems of delivery of baccalaureate programs. These delivery system changes will have greater impact on the traditional universities than on Athabasca university.

Some relief of the current and projected enrollment pressures on the traditional universities is likely to occur particularly at the third and fourth year program levels, as the request for transfer into these years will be substantially reduced through implementation of this model. Enrollment pressures at the first year level should also be reduced. Some incentives, and some marketing of the advantages of this model, may be necessary to increase the willingness of university personnel to participate in these programs. Enrollment pressures on the colleges may increase as these joint programs increase in attractiveness to prospective students, and provide new opportunities for adults in the regional communities. Consideration will have to be given to potential expansion of college-university program enrollment capacities.

In the two major cities, a decision will have to be made as to whether the community colleges should offer such programs, or if guaranteed transfer to the University of Calgary or the University of Alberta will meet the requirements in these cities. If such programs are incorporated in these colleges, enrollment pressures would be reduced even further at the the two major universities. There may be less utilization of college personnel in program provision due to the ease of university faculty participating in on-site program provision. This could cause inequities in resource allocation within community colleges in the system, and may contribute to development of perceptions of more prestigious degrees. If guaranteed transfer is adopted as the system in these two cities, again perceptions of inequity in resource allocations, and the prestige of degrees may develop. The two community colleges in these cities could be required to expand their university-transfer enrollments in total, or in specific programs, to reflect proportional university program enrollments to other community colleges. University involvement in the initial years of baccalaureate programs would then be reduced, and would allow the universities to reallocate resources to both on-site and off-site provision of third and fourth year courses. This solution might be perceived as more equitable by other institutions in the system.

Issues with the adequacy of college resources to particular baccalaureate programs, for example, programs which require extensive laboratory facilities, high technology equipment, or extensive clinical practice facilities, would be best resolved through development of a system-wide agreement which identifies suitable and not suitable programs for joint college-university programs. This would appear to resolve concerns with equity in types of programs available. System wide agreements would also be required to identify which programs will be offered by which university in which regions, and to identify minimum numbers of students necessary for course provision. This is necessary to ensure participation by all universities in these programs, prevent institutional conflict, prevent over-involvement of one or two universities in such programs, and increase the cost-effectiveness. In part such agreements already exist, but an expanded "official" agreement would clarify university responsibilities. Individual colleges and universities should be allowed to develop and negotiate agreements for complete degree program provision within the established guidelines.

In looking at potential negative outcomes of implementation of the Capstone model, there is a potential for the universities to increasingly question the viability and credibility of such program provision, and withdraw their support. Over time, the colleges could become increasingly convinced that they have sufficient resources, both human and physical, to offer their own degree programs, without university involvement.

CHAPTER 8
SUMMARY AND CONCLUSIONS

This study was conducted as a prospective policy analysis to determine if extension of degree granting capability to selected public community colleges is a feasible way to meet the perceived need to increase access to baccalaureate degree programs in Alberta, or if other solutions are seen by the key stakeholders as more desirable and feasible. The intents of the study were to describe the perceptions and positions of the key policy stakeholders regarding the need to increase access to, and availability of, baccalaureate degree programs in the province; to explore the desirability and feasibility of a variety of approaches to increase access to such programs, including extension of degree granting capability to the public colleges; to identify the approaches or policy solutions most acceptable to these stakeholders in resolving the access/availability issue; and to provide recommendations for policy formation based on these findings.

The study purpose and intents were met in that:

1. The extension of degree program provision (and increasing access to such programs) was found to be a significant issue in Alberta. There is both a high level of demand by the public for access to baccalaureate programs, and an increased need in the provincial economy for individuals prepared at the baccalaureate level. Increasing the provision of such programs on a regional basis and/or increasing the overall capacity of the postsecondary system appears necessary. Public definitions of equity in relation to access, educational opportunity, and economic opportunity in Alberta increase the pressure for further decentralization of baccalaureate education. Provision of equivalent postsecondary educational programs in all regions of the province is seen as necessary to provide equity within the province. This issue of baccalaureate degree program access and availability has become more

contentious over the last two years due to the continued escalation in applications and enrollments in baccalaureate degree programs at both colleges and universities, and the establishment of undergraduate quotas and enrollment controls by the traditional universities. Distinctly different views exist as to acceptable levels of access to such programs, cost effective delivery systems, ways and means to maintain quality in these programs, degree credibility, and the most appropriate approaches to resolve the access issue.

2. Extension of degree granting capability to the public colleges was not seen as the most desirable or feasible policy solution by the majority of the stakeholders. Although the overall enrollment capacity of the system would be increased, equity in access and opportunity to obtain a baccalaureate degree would be improved, and regional needs would be addressed by such a policy; the stakeholders in this study expressed major concerns regarding funding requirements, quality of the programs offered, the credibility of degrees awarded, the complete lack of acceptability of this solution to any of the universities, and the deleterious effect on current community college programs and services in the areas of career programming, community service, and continuing education.

3. Increasing access to and availability of baccalaureate degree programs through provision of joint college-university programs in the community colleges was clearly identified as the most desirable and feasible policy solution. In this model, the public colleges would maintain autonomy and control of the first two years of the undergraduate degree programs; the cooperating university would maintain control of the final two years and grant the degree. The acceptability of this model is dependent on involvement of all universities, university utilization of college physical resources and appropriately qualified personnel, and provision of adequate funding to support the programs. The maintenance of present community

college mandates and of the teaching emphasis in college classes also contribute to the acceptability of this model to all stakeholders. Research and involvement of students in research activities would remain the responsibility of university faculty. All respondents observed that program quality and degree credibility would be maintained or improved by this policy alternative, due to the continuing maintenance of standards by the universities. University mandates remain essentially unchanged, although changes would be required in the delivery systems utilized by university personnel. Enrollment pressures on the universities should be reduced. Funding requirements are seen to be more reasonable than those required by other alternatives.

4. It is recommended that joint university-college degree programs be encouraged and supported as the means to increase provision and access to baccalaureate degree programs in the province. Establishment of on-line access and interlibrary loan systems between the colleges and university library systems would greatly enhance the feasibility and quality of these programs. Decisions will be required as to which programs will be offered by which universities at which college. It is recommended that such decisions be made through an inter-institutional advisory committee to ensure that quality, standards, and equitable provision of services be maintained. Agreements between universities and colleges as to the actual program format may vary from program to program, depending on such factors as the availability of human and physical resources in each location.

Research Design and Process

In order to place the study in perspective, an extensive review of the literature was conducted. This review established that the demand for baccalaureate education and a growing concern with limitation of access to such programs was a worldwide phenomenon. A large part of the increasing demand is due to the growing need to educate individuals who can function in an adaptable and flexible way in a rapidly changing economy and society. There is considerable controversy as to the most appropriate level of higher education which will best meet these changing societal needs. In Alberta, there is recognition by both the government and the general populace that the postsecondary educational system must adapt to the changing requirements of society and the economy. In addition, regional access to undergraduate degree programs has been a continuing issue in the province since the creation of the first university. The issue of access to such programs has been heightened over the past five years due to authorization of degree granting capability in the private colleges but not the public colleges, control of undergraduate enrollments in the two major universities, and marked increases in application and enrollment rates in undergraduate degree programs in both colleges and universities throughout the province. The government position is that re-orientation, restructure, and internal reallocation of resources is required to increase the cost effectiveness of postsecondary education in the province. Development of such changes must involve a wide range of stakeholder groups. No studies of the perspectives or positions held by individuals or groups within the province on access to degree completion programs were apparent in the literature review; several proposals and allusions to proposals of public colleges to obtain degree granting capability were identified.

A conceptual framework for prospective policy analysis of the issue of extending access to undergraduate degree programs in Alberta was developed. This framework incorporated aspects of Mitchell's (1981) Legislative Decision Model of Policy Formation, Dunn's (1981) Model of Policy Formation, and interest group theory. The framework utilizes a qualitative case study technique to describe and analyze the perspectives and positions of identified key stakeholders regarding the issue of extending access to degree programs. The framework specifies description and assessment of the socio-economic and political context of the environment, clear identification of the stakeholders with major influence on (or significantly impacted by) policy concerning this issue, description and definition of the issue as viewed by the stakeholders, analysis of the issue, development and ranking of feasible policy solutions, and development of policy recommendations. The framework was particularly useful in directing the study process. The framework allowed for considerable flexibility in determining data requirements and in developing data analysis techniques, within clearly focused boundaries. Given the quantity and diversity of the data collected, the framework was of great assistance in completing the study.

Six public colleges in the major urban and rural regions of Alberta, the four universities, and the Department of Advanced Education were selected as the key stakeholders in this issue. The institutions were selected for the study through criterion-based sampling. The criteria used in this selection were: the institution offered two years or more of university level programs in a wide variety of disciplines; the institution was deemed likely to have the resource base necessary to support complete undergraduate degree programs; the institution appeared to have considerable influence on policy development; and the institution was located in one of the major regions of the province. The private colleges and the technical institutes were excluded as a result of application of these criteria. One urban public college declined to participate in the study. The Alberta Department of Advanced Education was identified as essential for inclusion in the study based on the responsibility of this department for the postsecondary educational system in Alberta. Interviewees in each of the selected institutions and agencies were selected by a process of purposive sampling, based on identification of the most knowledgeable and/or accepted spokesperson in each selected institution or agency. Presidents of all institutions, the Deputy Minister and Assistant Deputy Minister, Policy and Planning, of the Department of Advanced Education, and three college board chairmen were interviewed. Although the researcher had initially intended to interview all of the board chairmen in the selected institutions, the reluctance of these individuals to participate, based on beliefs that the Presidents could specify the Board position, led to a decision to not pursue interviews with these individuals.

Data collection was carried out through document analysis prior to and concurrent with interviews. Documents included government and institutional policies, published and unpublished position papers, newspaper articles, and recently published journal articles and books related to the issue of extending degree granting capability. The major difficulty experienced by the researcher was in determining an end point to the document review, particularly as the issue became more public in the fall of 1989. The document and literature review was completed as of November 1989. Pilot interviews were conducted prior to undertaking the interviews. Semistructured interviews with the respondents were conducted in three phases: college respondents, university respondents, and the respondents for the Department of Advanced Education. Content analysis and comparative analysis procedures were used in analysis of both the document and interview findings. Categories for data recording and analysis were developed based on the conceptual framework and the research questions. Each phase of interviewing used an evolving interview format which ensured that perspectives or points of controversy identified in the previous phase of interviewing would be discussed. External audits of the data collection procedures, development of coding categories, and interpretation and reporting of findings were conducted throughout the study. All interview transcripts were returned to the respondents, edited and approved by these individuals, and returned to the researcher, sometimes with additional information or comments noted.

The analysis of the data and the development of policy recommendations were conducted according to an analytical framework consisting of five elements based on an adaptation of the assumptional analysis technique of data analysis. The description of the issue, the beliefs, assumptions, and facts evident in the stakeholder perceptions of the need for extension of degree granting capability and the major considerations and constraints affecting perceptions of how or if such extension should occur were identified. Identification of the issue,the similarities and conflicts evident in the stakeholder perspectives as to the desirability and feasibility of extending degree granting capability were explored and specific sub issues to be addressed in policy development were identified. The development of proposed policy solutions included identification of possible models for extending degree granting capability and the perspectives of the stakeholders concerning each model. The feasibility of policy alternatives was assessed through application of a rating scale developed to assess the acceptability level of each model on twelve different factors and on an overall basis. Recommendations for policy development were based on the analysis of feasible solutions. The most acceptable model was described; the projected institutional responses and outcomes of implementation of the policy recommendation were explored.

The rating scale developed to determine feasible and acceptable policy alternatives proved to be an adaptable and comprehensive assessment tool which resulted in clear identification of the most acceptable alternative(s) to the key stakeholders. The number and description of the models can be readily adjusted. Factors identified in each model as affecting acceptability can be expanded or reduced. The rating scale of -1 to +3 worked effectively in quantifying diverse data. The actual rating descriptors could be changed or clarified to more accurately reflect the objectives and goals of the policymakers. The weighting assigned to each factor can also be varied according to the relative importance of each factor to the policymakers. With clear definition of these elements, the model should result in a significant level of certainty regarding the acceptability, and therefore feasibility, of alternative policy solutions.

Measures to enhance validity and reliability of the study included triangulation, external audits, and provision of detailed descriptions of the context of the study, the stakeholder perspectives, and the research methodologies and processes. The researcher recognizes the ethical concerns regarding potential negative effects on the participants in the study which could result from the fact that anonymity and confidentiality of responses could not be maintained and the possibility that political tensions between institutions, or between institutions and government, could be exacerbated by this study. The approval of interview transcripts and gaining formal consent to use the data so obtained by each of the study participants were the major measures used to address the ethical concerns.

Conclusions

The findings of this study provide evidence that the provision of baccalaureate degree education in Alberta is a policy issue which will require resolution in the near future. The acceptability of various policy alternatives, and therefore the feasibility of implementation of such strategies, was determined to be dependent on twelve factors:

1. aggregate enrollment capacity in the system must be increased
2. equity of access must be provided to a greater extent than presently exists
3. equity of opportunity in types of programs provided, formats of program delivery, and requirements for personal expenditure in obtaining such education must be provided to a greater extent than in the present system
4. both actual and perceived community needs for local provision of both degree and non-degree programs must be addressed in the policy
5. funding requirements should be limited and incremental in nature
6. degree program quality should be perceived by both the higher education community and the general public as equal or improved from the present system

7. maintenance or improvement of degree credibility must be assured

8. the policy must be acceptable to the public in terms of increased access, opportunity, degree quality and credibility, utilize existing resources and facilities to the maximal extent, and be implemented at a reasonable cost

9. the policy must be acceptable to the universities and their personnel in terms of maintaining present standards of quality and credibility; having minimal impact on university operations; and maintaining or enhancing existing university resources

10. the policy must be acceptable to the colleges and their personnel. Acceptability to the colleges is dependent on the ability of the policy to meet regional needs, to maintain college autonomy; to have limited or no impact on general college operations, and to enhance college resources and facilities.

11. the model must be acceptable to the government. Acceptability to the government requires that limited or minimal increases in funding are necessary; cost-effectiveness is maintained in the postsecondary system; quality of programs and credibility of degrees is ensured; regional needs for increased access and equity in program provision are met to a substantial extent; and the policy creates limited impact on community college and university mandates and operations.

12. the policy must not create concomitant negative outcomes.

Analysis of the data resulted in the conclusion that the major need perceived by the stakeholders is to increase access to baccalaureate programs through increasing the provision of such programs in regional areas which do not have universities. Simply increasing the enrollment capacity of the existing universities is not seen to be an acceptable or feasible policy solution. Provision of regional programs is seen to have major advantages: a decrease in enrollment pressures at the universities in all years of undergraduate programs, the prevention of a "transfer crisis" as increasing numbers of college students insist on access to third year programs at the universities, and the opportunity for the universities to focus on issues of program quality and standards, rather than on access. A secondary effect may be a more positive public view of the universities than presently exists. Offering degree programs in these regional areas is seen as an appropriate extension of college mandates by the regional community colleges. It is also seen as a flexible, adaptable way to meet present and future educational needs of the regional communities. The maintenance of emphasis on teaching within the college-controlled portion of the degree program may more effectively meet student needs. Research by college faculty beyond the present level of applied or teaching-related research should not be supported. Research should remain a major responsibility of the universities. College faculty should not be required to hold PhD qualifications. Enrollment pressures on the colleges would increase significantly. Incremental funding to accommodate these enrollment pressures would be necessary, so as to forestall pressures towards reallocation of resources from existing non-degree programs.

Some marketing strategies directed towards university faculty and/or an incentive program may be necessary to increase the willingness of university personnel to participate in regional programs. The universities must be assured that the final two years of undergraduate degree programs would remain under their control. Universities may withdraw their support if funding is inadequate, if program quality and degree credibility becomes an issue. Not all colleges in the postsecondary educational system are supportive of collaborating with a university in provision of the third and fourth year of degree programs. This position may readily change if other colleges in the system do provide complete degree programs on site. Based on the existing mandate of community colleges to meet the educational needs of their communities, colleges should have the right to choose for themselves whether or not to participate in these collaborative programs.

A particular problem exists for development of collaborative programs in the community colleges in Edmonton and Calgary. If such programs were offered in these colleges, enrollment pressures at the two major universities would be significantly reduced. However, there may be less utilization of college personnel in these programs due to the ease of university faculty participating in on-site programs in the colleges. This could cause inequities in resource allocation within the community colleges in the system, and could contribute to perceptions of differing quality, or differing prestige in degrees. A decision will need to be made as to whether the community colleges in Edmonton and Calgary should offer full degree programs, or expand their provision of first and second year programming. Expanding the existing university transfer programs would reduce the enrollment pressures at the University of Alberta and the University of Calgary and permit these universities to reallocate resources to provision of third and fourth year undergraduate courses both on-campus, and at regional locations. Guaranteed transfer between these colleges and the universities would be essential. Again, a danger exists that other institutions or communities may perceive there is inequity in resource allocations, and/or in the prestige of degrees awarded. Resource allocation, and utilization of university and college personnel in joint programs must be as equitable as possible throughout the postsecondary educational system.

A system-wide mechanism must be established to determine the adequacy of college resources to facilitate and support specific programs, develop formal agreements as to which university should offer programs in which regions, determine minimal numbers of students necessary for course provision, and develop guidelines for negotiation of degree programs between colleges and universities. Individual colleges and universities should then be allowed to develop and negotiate agreements for complete degree program provision within the established guidelines.

Over time, implementation of joint university-college degree programs may result in the colleges pursuing degree granting status, particularly once the ability to offer credible programs utilizing primarily college resources is demonstrated. The universities may come to increasingly question the viability and credibility of such programs, particularly if issues of control of standards in the first and second year of degree programs, or of adequate funding are not resolved. The universities may then withdraw their support.

Some mechanism for increasing the level of communication about current problems, planning, and possible future strategies, among the postsecondary institutions, and between the institutions and the Department of Advanced Education, should be explored. During the study, a very limited amount of information appeared to be available to presidents of institutions regarding the specific positions or plans of other institutions, and there was frequent recourse to speculation about other institutional plans and the positions of the Department of Advanced Education. This does little to foster cooperation among institutions in resolving postsecondary education issues.

Suggestions for Future Research

This research has demonstrated that there is merit to a structured assessment of stakeholder perceptions in formulating policy issues and developing and recommending possible resolution strategies. Such assessments provide insights and information which may not otherwise be available to the policy analyst.

Possible topics for further research are identified as follows:

1. Does this research influence the process of policy formation? Does the resultant policy reflect the research findings? If no policy results in the near future, or the policy does not reflect these research findings, why?

2. An equivalent study which focuses on some or all of the postsecondary institutions not included in this study could provide further insight into the perspectives within Alberta on access to and provision of degree programs, and significantly contribute to identification of possible outcomes. Such a study could also serve as a check on the adequacy of selected stakeholder perceptions in policy formation, and the utility and validity of the data analysis and feasibility testing models.

   In particular, the perspectives of individuals in the private colleges, and technical institutes may be of significance.

3. A comparative case study of one public college actively pursuing degree completion programs and one public college opposed to expanding university programming beyond the second year of baccalaureate programming could deepen the understanding of this issue and its relation to institutional dynamics.

4. Further study of the very strong and often opposing regional points of view on postsecondary education access and opportunity, and requirements for economic and social development of these regions would enhance understanding of policy issues in the province

5. A study which compares graduates of joint college-university degree programs (once these programs become available) and generic university degree programs in terms of employability, ease of entry, and success in postgraduate programs could assist in further policy development. Few studies are available which directly compare such programs and their outcomes for graduates.

6. An exploration of possible future roles and mandates of universities in the province may assist in more clearly defining required further development within the postsecondary education system.

7. A study of another political issue utilizing the conceptual and research framework of this study would strengthen the knowledge base of this form of prospective policy analysis.

Summary

This study is a prospective policy analysis of the issue of extending degree granting capability within the province of Alberta. The study relies on the perceptions and positions of key policy stakeholders in describing the issue, and in determining policy recommendations.

The study was conducted as a qualitative case study, utilizing a research framework incorporating policy formation concepts and interest group theory. Coding categories for data reporting, content analysis and comparative analysis were developed. An analytical framework was developed to describe possible policy options and to analyze the acceptability of each option in the perceptions of the key stakeholders. A rating scale was utilized to determine the most acceptable and feasible policy option.

The major conclusion of the study is that access to baccalaureate programming in the province should be increased through increasing the provision of complete undergraduate degree programs in at least some of the public colleges. The policy approach deemed most acceptable and feasible to the key stakeholders is that of joint college-university provision of these programs, with the college maintaining responsibility for the first two years and the universities maintaining responsibility for the final two years and for granting the degree.

It is hoped that this study will provide valuable information to individuals and policymakers in the Alberta postsecondary educational system, and assist in further development of policies regarding access to undergraduate degree programs in the province. The study should also extend the body of knowledge regarding problem structuring through assessment of key policy stakeholder perceptions, analysis techniques for policy formation, and the value of qualitative techniques in data collection and analysis. The researcher believes the rating scale developed to analyze and quantify qualitative data should assist other researchers in reaching conclusions in qualitative studies, and provides one technique of increasing reliability and validity in such studies.

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APPENDICES

APPENDIX A: INTERVIEW FORMATS

Round One Interview Questions

1. Is this institution / board interested in seeking degree granting status?

2. What effect do the following factors have on the institution's stance on this issue?

   a. Present or projected demand for university transfer programs

   b. Concerns with transfer arrangements

   c. Demand/need for complete degree programs in the community or region

   d. Universities control of undergraduate enrollments; establishment of quotas; residency requirements.

   e. Student demographics

   f. Provision of off-campus programs by the universities.

   g. Other factors?

3. Has any planning been done to date to increase the number of university programs offered through the college, in pursuing degree granting status, or in arranging for complete degree programs to be offered in the college?

   a. What disciplines are degrees most wanted in?

   b. Are other ways of increasing degree programs other than degree granting seen as a more desirable or feasible way to increase degree program provision?

   c. Is increasing the number of university programs a first step towards becoming degree granting?

3. How would this college respond to approval for colleges to become degree granting?

4. How would the college respond to a decision to leave degree granting authority with the universities?

5. If the opportunity to become degree granting existed, what would the college require in order to implement this solution?

   a. Human resources

   b. Financial resources

   c. Library ,laboratory, physical facilities

   d. Other

4. How feasible (politically, economically) is extension of degree granting status?

   a. To this college?

   b. To other colleges?

   c. Is there a need for more degree granting institutions?

5. What effects do you think extension of degree capability would have on the postsecondary education system.

   a. Programming

   b. Access

   c. Competition

   d. Role of community colleges

6. What do you expect to be the reaction of other post-secondary institutions?

7. Are their other solutions to meet the demand for degree programs?

8. What is the your view of the desirability and/or feasibility of these solutions?

9. Do you have any documents which support this position which I could have copies of?

Round Two Interview Questions

The college interest in obtaining degree programs is based on a perception of demand and need for increased numbers of baccalaureate degree prepared individuals in Alberta, and a belief that the universities cannot meet the demand for such programs.

1. Do you think there is a need to increase the number of baccalaureate degree graduates in Alberta?

    a. Why/why not

    b. Is there a quantifiable extent of need for degree prepared individuals?

2. Can the University of Alberta meet the present and future needs for provision of baccalaureate education?

    a. What factors affect the capability of the University of Alberta?

    b. What has been the effect of the raised entrance requirements and establishment of quotas on access to undergraduate education?

    c. What effect will the proposed plans to focus university operations on graduate studies and research have on future undergraduate enrollment?

The effect of the changed entrance policies at the universities is acknowledged by the colleges as contributing to the increase in university transfer enrollments. The college respondents believe that a "transfer crisis" is rapidly developing, that is, that placements for college transfer students will not be readily available (or automatically granted) in the universities.

3. Do you believe that students enrolled in college university transfer programs will encounter difficulties in transferring to university? Are there particular programs in which difficulties are anticipated?

4. Is it the intent of this university to restrict transfer?

    a. What factors are affecting university capability to automatically enroll transferring students?

b. What proposed criteria would apply to transfer student selection?

5. Are there any plans, proposals, discussions within the postsecondary system to address the transfer issue?

Due to changing student needs, primarily those of adult learners, and the social and economic needs and demands of the regional areas for degree programs, the colleges believe there is a need to increase the availability of all four years of undergraduate degree programs in the regions.

6. Do you believe there is a need to increase the regional availability of degree programs?

   a. Why/why not

   b. What role does the university believe it should play in provision of regional programs?

   c. Is extension of undergraduate education in the colleges beyond the second year of such programs seen as desirable or feasible?

   d. What issues and concerns arise regarding regional provision of degree programs?

7. Does the University plan to expand or facilitate access to undergraduate programs beyond the present structure?

The majority of the colleges outside the major cities are interested in establishing "brokered" programs through which the third and fourth year of undergraduate programs would be offered through the colleges, but the degree offered by the sponsoring university.

8. What is the university's response to such proposals?

   a. What factors affect the response?

   b. Is quality of education a major factor in the response, that is, does the university perceive that the colleges have, and will continue to be able, to provide quality undergraduate education?

c. Do perceptions of desirability or feasibility change dependent on the college under discussion?

Red Deer College is openly pursuing authority to grant degrees in selected programs. At least two other colleges have long term goals to obtain such authority for selected programs, in both general academic and professional-occupational program areas.

9. How will the university respond? and Why

10. How desirable and feasible (economically and politically) is such a proposal?

11. If degree completion programs were extended by any mechanism, what would be the effect on the quality of baccalaureate education, and on the postsecondary system function?

12. Are there other solutions to resolving the demand/capacity issue in degree education?

13. Are there other issues or concepts which affect resolution of this issue?

14. Do you have any written material which exemplifies this universities' position on these issues which I could have access to?

Round Three Interview Questions

1. Do you think there is a need to increase the number of baccalaureate degree graduates in Alberta?

    a. Why/why not

    b. Is there a quantifiable extent of need for degree prepared individuals?

2. Can the universities of Alberta meet the present and future needs for provision of baccalaureate education?

    a. What factors affect the capability of the universities?

    b. What has been the effect of the raised entrance requirements and establishment of quotas on access to undergraduate education?

    c. What effect will the proposed plans of the U of A and U of C to focus university operations on graduate studies and research have on future undergraduate enrollment?

    d. What role should Athabasca University play in meeting these needs?

All respondents believe that a "transfer crisis" is rapidly developing, that is, that placements for college transfer students will not be readily available (or automatically granted) in the universities, unless measures are soon taken to address this issues.

3. Do you believe that students enrolled in college university transfer programs will encounter difficulties in transferring to the university? Are there particular programs in which difficulties are anticipated?

4. Should transfer be restricted?

5. Are there any plans, proposals, discussions within the postsecondary system to address the transfer issue?

Due to changing student needs, primarily those of adult learners, and the social and economic needs and demands of the regional areas for degree programs, some respondents believe there is a need to increase the availability of all four years of undergraduate degree programs in the regions.

6. Is there a need to increase the regional availability of degree programs?

   a. Why/why not

   b. What role should the universities play in provision of regional programs?

   c. Is extension of undergraduate education in the colleges beyond the second year of such programs seen as desirable or feasible?

   d. What issues and concerns arise regarding regional provision of degree programs?

7. What is the departments view on access versus quality?

8. Are there plans to expand or facilitate access to undergraduate programs beyond the present structure?

9. Who defines the definition of a baccalaureate degree? (Controversy regarding need to be exposed to research and scholarly activities).

10. Is there a possibility of first-class/second-class degrees being established?

The majority of the colleges outside the major cities are interested in establishing "brokered" programs through which the third and fourth year of undergraduate programs would be offered through the colleges, but the degree offered by the sponsoring university.

8. What is the Department's response to such proposals?

   a. What factors affect the response?

   b. Is quality of education a major factor in the response, that is, do the colleges have, and will they continue to be able, to provide quality undergraduate education?

   c. Do perceptions of desirability or feasibility change dependent on the college under discussion?

Red Deer College is openly pursuing authority to grant degrees in selected programs. At least two other colleges have long term goals to obtain such authority for selected programs, in both general academic and professional-occupational program areas.

9. How will the Department respond? and Why

10. How desirable and feasible (economically and politically) is such a proposal?

11. If degree completion programs were extended by any mechanism, what would be the effect on the quality of baccalaureate education, and on the postsecondary system function?

12. What controls, if any, are seen to be needed if degree granting capability is extended in any form?

12. Are there other solutions to resolving the demand/capacity issue in degree education?

Suggested Models: Expand present universities and facilities

Fund and encourage brokered programs

Strongly support Athabasca University provision of programs

Allow limited degree granting in colleges either through the University College or Private Colleges (CAE) models

Establish a board similar to PCAB to assess and recommend either brokered models or degree granting.

Create a fifth university.

13. Are there other issues or concepts which affect resolution of this issue?

14. Is the department developing (or has developed) position papers, recommendations on this issue? Could I see them?

15. Are other models being considered?

APPENDIX B

PERMISSION TO UTILIZE INTERVIEW DATA

Having reviewed the transcription of the audiotape recording of an interview held with me on the topic of extending degree granting capability to the public colleges in Alberta, I grant permission to Heather Montgomerie to utilize this information in her doctoral thesis for the Department of Educational Administration, University of Alberta. I understand the information will be presented in either summary form or as a direct quote, with reference to my position title, but not referring to my specific name.

The information may be used:

1) as provided in the transcript form ________

2) as corrected _________

3) with deletions as indicated _________

4) with additions as indicated _________

Signature:______________________________________

Position:_______________________________________

Date: ________________________, 1989.

I would like to receive, on completion of this study:

_______ A copy of the findings and recommendations

_______ A copy of the complete thesis.

(Expected completion date is December 1989).

Thank you so much for participation in this study.

APPENDIX C

DIFFERENT FACTOR WEIGHTINGS APPLIED TO ANALYSIS OF MODELS TO EXTEND DEGREE PROGRAMS